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ABSTRACT

Guidelines for implementation of the team process as part of the middle school concept are presented. Topics discussed in the 13 chapters include effective middle school characteristics, student needs, curriculum design and development, team functions and effectiveness, scheduling, teaching strategies, student grouping, leadership, staff development, and team evaluation. Because successful team process implementation depends greatly on teacher motivation and commitment, a staff development program is recommended. (29 references) (LMI)

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THE TEAM PROCESS in the Middle School: A Handbook for Teachers

by

Elliot Y. Merenbloom

Second and Enlarged Edition

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in the Middle School:
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National Middle School Association

Few educators would take issue with the contention that a preferred way to organize a middle school faculty is by teams, whether interdisciplinary or other types. Some would even go so far as to say it is the only way. Advocating and organizing a team organization are two different things. Because most middle level teachers have had no specific training or preparation for working in teams, they need help in order to implement this highly desirable arrangement for implementing a middle level instructional program.

This monograph provides such help. It is thorough, practical, reality based, and field tested. Sufficiently detailed and replete with examples, it is a functional handbook for teachers rather than a theoretical treatise.

Elliot Y. Merenbloom, the author, is the successful principal of Pikesville Middle School in Baltimore County, Maryland. He has worked with schools across the country and directed numerous institutes and workshops dealing with teaming. In this second and greatly enlarged edition, Mr. Merenbloom has reflected the concerns and interests of users. Additional chapters and new materials in other chapters make this popular publication even more useful. The Association is most grateful to him for his willingness to undertake this extensive expansion.

John H. Lounsbury
Editor, NMSA Publications

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Preface

"The Team Process in the Middle School: A Handbook for Teachers" was initially created as a guide for classroom teachers who desire to work in clusters or teams to meet the learning needs of middle school students. Successful teaming at the middle school level depends upon the motivation, skills, and abilities of teachers to work together to deliver an instructional program that responds to the physical, intellectual, social-emotional, and moral developmental needs of early adolescents. This second and enlarged edition has the same goal and is undergirded by this same belief.

Most middle school teachers have not taken specific courses in the team process. Yet, it is imperative that middle school teachers function effectively in teams if the middle school concept is to be successful in this nation and abroad. Therefore, staff development programs must help teachers learn about the team process until such time as undergraduate and/or graduate courses address this topic adequately.

This publication is largely a description of the efforts of the Pikesville Middle School teachers working in Baltimore County, Maryland. These procedures can be replicated, however, in any middle level school. The Pikesville Middle School teachers understand the real potential of the middle school concept and recognize that the team process is a vital element in achieving that goal.

I would like to thank two people for their help in producing the second edition of this monograph:

- My wife, Ilene, for typing and re-typing the manuscript.
- My friend, John H. Lounsbury, for his continuing and untiring efforts on behalf of the middle school movement in general and in particular for his help in editing and managing the production of "The Team Process in the Middle School: A Handbook for Teachers."

Elliot Y. Merenbloom

1

Characteristics of An Effective Middle School

Successful team process experiences in the middle school should be based on a thorough understanding of the characteristics of an effective middle school as well as the middle school concept itself. Although the movement started in the early 1960's, the literature continues to define more fully the meaning of the middle school concept. All that happens in a middle level school should be based on the foundations described in the first three chapters. Teachers should keep in mind the nine characteristics of an effective middle school that are presented below with some elaboration.

An effective middle school:

(1) Features a program that responds to the physical, intellectual, social-emotional and moral needs of the early adolescent learner.

Current data about the physical, intellectual, social-emotional, and moral development of the early adolescent must be examined. The earlier onset of puberty, the unevenness of growth, the cognitive development process, the importance of the peer group, the sensitivity of students, and the need for values education must be studied. Then, educators should identify the implications of each of these categories of data to realize the importance of counseling and guidance, the variety of activities needed within a lesson, the need to include concrete examples as concepts are introduced, the focus on skill development, the role of peer tutors, the scope and sequence of a home-base program, and the need for consistent discipline policies. Finally, educators should identify and integrate the implications of the data from all of these categories to analyze the curriculum for the middle grades, school organization options, the nature of the learning environment, the reading program, and/or the role of the classroom teacher. Specific aspects of the program must be based on the identified needs of the student population.

(2) Possesses a definite curriculum plan that includes factual information or organized knowledge, skills, and personal development activities that can be correlated with each other.

Alexander and others recommend a curriculum model that consists of factual information, skill development, and activities designed to help pupils understand and cope with the changes which they are or will be experiencing. Each subject area should contain these three elements, and an effort should then be made to correlate these elements among the various subjects in the curriculum. This curriculum model should become the basis of the teaming process. The issue of the home-base/teacher advisory program must be addressed within the curriculum study. Also, questions related to the concept of exploration and/or an elective program fall into this category. The curriculum must be geared to the learning needs of the pupils in the middle grades.

(3) Builds on the successes of elementary education and, in turn, prepares pupils for a successful experience in the high school.

An effective middle school is a transitional experience for pupils who are at various stages of approaching adolescence. The program should build on the successes of elementary education by focusing on the learning needs of each student as an individual, having a sequential approach to skill development, providing for the correlation of content, and having a team approach to teaching. The teaching of reading and related communication skills should be emphasized in every subject area every period of the day. In turn, the middle school experience should adequately prepare students for the ninth grade program in the high school where students will likely have various teachers in a fully departmentalized approach and have more decisions to make with regard to the curriculum as well as the extra-curricular program. The middle school should serve as a meaningful connection between elementary education and the high school program.

(4) Employs teachers who focus on the learning needs of pupils by using a variety of teaching techniques that actively involve students.

Each middle school teacher should know the special learning needs of each pupil that he or she teaches. Early adolescent students have unique learning needs that are the result of their individualized timetable for physical, intellectual, social-emotional, and moral development. Appropriate strategies include student-to-student interaction; clear, concise structure for activities; adequate motivation, readiness, and goal-setting for each activity; clear transitions to connect the various activities; the inductive process; lessons that move from the concrete to the abstract; and enrichment activities for formal thinkers.

(5) Organizes teachers into interdisciplinary and/or disciplinary teaching teams using block-of-time and modular scheduling techniques to best deliver the instructional program.

Teaching teams provide an excellent opportunity to strengthen the instructional program, focus on the learning needs of pupils, and facilitate flexibility. Interdisciplinary teams usually consist of four or five teachers of four or five subjects who plan for and commonly teach four or five classes during the same periods of the day. In grade six, two teachers could coordinate an interdisciplinary approach to the curriculum for a common group of students. A disciplinary team involves two or more teachers of the same subject who teach two or more classes of that subject at the same time. Block-of-time scheduling permits the teachers who teach at the same time to also be available at the same time for a team planning period. Modular scheduling strategies permit teachers to subdivide the total block-of-time for teaching into various modules or time periods to accommodate all of the aspects of the instructional program.

(6) Recognizes the importance of affective education by providing for a home-base or teacher/advisory program, stressing the importance of self-concept in the curriculum, and working as a total staff to provide a positive climate for learning.

Traditionally, secondary school teachers are responsible for addressing the cognitive or informational needs of students. Additionally, middle school teachers are asked to focus on the affective or emotional needs of a child's development. The home-base or teacher/advisory program may include orientation to the new school and/or grade, techniques to resolve conflict, study skills, and communication skills. The focus on self-concept, however, should be included in all aspects of the instructional program. The overall climate of the school should be positive so that youngsters will grow and learn in a healthy environment.

(7) Promotes flexibility in the implementation of the daily, weekly, and monthly schedule of classes to best meet the varying needs of students.

Flexibility is a key word in the middle school movement. Since students are in a highly individualized stage of development, the schedule and program must be flexible in order to respond to changes and needs evident in the various stages of transition. The master schedule should provide the broad, general parameters but can and should be altered by the various teaching teams on a daily, weekly, or monthly basis. Every class meeting need not be for fifty minutes. In some cases, classes can be less than fifty minutes; for specific purposes, classes could be extended to sixty or even seventy minutes. On a weekly basis, special modules could be arranged for spelling, handwriting, or a skills lab program. Pupils could be grouped and regrouped as needed. Teaching sections within a team could rotate schedules, special arrangements could be made for field trips, or an entire team's schedule could be exchanged with another team's schedule on a semester or trimester basis.

(8) Emphasizes the guidance and counseling function of each staff member by demonstrating genuine concern for the welfare of each student.

Every teacher in the building is a counselor, one who is sensitive to the needs of students. A student should be able to turn to any member of the professional staff with whom the student feels comfortable to seek help with a problem. Every teacher may have an advisory or home-base group. The primary focus of teaching teams is the genuine concern for each student's welfare. Teachers should use every opportunity in the curricular and extra-curricular programs to teach or reinforce career development and decision making, to enhance self-concept, and to relate instruction to the personal development of the individual.

(9) Evaluates the program on a regular basis and makes changes that enhance the learning process.

Evaluation takes place in many ways. Surveys, questionnaires, feedback from parents, reports from regional accrediting groups, classroom observations, and the evaluations of individual teachers all provide important information which indicates if the program is succeeding. It is not necessary to wait until the end of the school year to make changes. Those responsible for schools must monitor the extent to which learning is actually occurring and act accordingly.

SUMMARY

These nine characteristics describe an effective middle school. The "bottom line" is to create an effective climate for learning for pupils in the middle grades. As an activity, an entire faculty or a team of teachers should answer these questions:

Activity:

1. How many of these nine characteristics are evident in our school or on our team?
2. Which characteristic(s) should be a high priority for implementation or reinforcement?
3. What will our strategy be to implement or reinforce the characteristic(s)?
4. How will we evaluate our efforts to implement or reinforce the characteristics?
5. How will we select the next priority for implementation or reinforcement?

2

Responding to the Needs of The Early Adolescent Learner

As teachers prepare to work in a middle school setting, they should become very familiar with three major elements of the middle school concept: (1) the needs of early adolescent students, (2) a curriculum model for the middle level, and (3) a variety of organizational options for organizing middle level schools for effective instruction. This chapter will focus on the needs of students; the next chapter will highlight thoughts about curriculum and how to deliver that curriculum.

In this chapter, teachers will have an opportunity to learn about the physical, intellectual, social-emotional, and moral needs of the early adolescent and then to identify the implications of the content in each of the four areas. Finally, teachers will be able to review data in all of the categories to list overall implications for curriculum, organization of the school, nature of the learning environment, role of the teacher, and the reading program in the middle school.

In such a simulation, middle school teachers will have the opportunity to recreate the birth process of the middle school movement. The fathers of the middle school movement examined data in these categories and proceeded to create a program that was responsive to the unique needs of the early adolescent. Perhaps the real beauty of the middle school concept is that a group of teachers, administrators, guidance counselors and central office personnel can design a middle school in the same fashion that the original middle schools were created in the early 1960's.

PHYSICAL DEVELOPMENT

Early adolesence is a period of extensive physical growth. There appears to be one blueprint for the growth of girls and a separate plan for boys. Girls may begin to enter puberty as early as 8½ years of age and are finished by the tenth grade in most cases. Boys, on the other hand, tend to lag two years behind girls. The average age for the appearance of pubic hair in boys is 12½ years; the average age for the beginning of boys' most rapid growth in height is 14 years. Males may not complete puberty until age 20.

Two major conclusions can be derived from this information: (1) there are both early and late maturers among both girls and boys and (2) students in grades 5-8 demonstrate the greatest variation in physical growth of any clustering of grade levels. The key words are *individual differences* and *variations* in growth patterns. Below is a chart of data made available by The Center for Early Adolescence that summarizes this key information.

Table I
The Events of Puberty in Girls

	Normal Range of Onset		
	Average Age	**Earliest Age**	**Latest Age**
1. Beginning of Breast Development	11¼ yrs.	8¾ yrs.	13¼ yrs.
2. Appearance of Pubic Hair	11½ yrs.	9 yrs.	13½ yrs.
3. Beginning of Most Rapid Growth	12¾ yrs.	10½ yrs.	14½ yrs.
4. First Menstrual Period	12⅔ yrs.*	10¾ yrs.	15½ yrs.

* There is some evidence to indicate that menarche begins six months earlier for American girls.

Table II
The Events of Puberty in Boys

	Normal Range of Onset		
	Average Age	**Earliest Age**	**Latest Age**
1. Beginning of Enlargement of Testes (becoming greater than 1 inch long)	12 yrs.	9½ yrs.	13½ yrs.
2. Growth of the Penis	12¼ yrs.	10 yrs.	14 yrs.
3. Appearance of Pubic Hair	12½ yrs.	9½ yrs.	14 yrs.
4. Beginning of Most Rapid Growth in Height	14 yrs.	11½ yrs.	16 yrs.

Remember: A young person who shows early development will complete the physical changes of adolescence at an earlier age than a young person who is a late developer. Adolescents who begin to develop earlier will complete their physical development faster than adolescents who develop later.

Source: 1982 The Center for Early Adolescence,
Early Adolescence: What Parents Need to Know

A significant study of the physical development of the transescent was the Boyce Medical Study conducted by Dr. Allen Drash and Dr. Donald Eichhorn. This study looked at the impact of biological maturation on the learning process and found a high correlation between learning and maturation. As a result, the authors of the study recommended a non-graded or developmental age concept based on Tanner's stages of adolescence: pre-pubescent, emerging adolesence, and adolesence. Continuous progress teaching/learning strategies were suggested.

A major outcome of the research on physical development was the recognition of a need for a home-base or advisor/advisee program that would enable transescents to better understand and better cope with the changes taking place. Sex education must be a key element in the curriculum. As teachers plan for lessons, they should recognize the short attention span and low tolerance for fatigue of these students. Adults must be sensitive to the feelings of students at the various stages of development and be careful not to reinforce feelings of inadequacy.

INTELLECTUAL DEVELOPMENT

There is also a wide range of mental development occurring between the ages of 10 to 14. One of the most exciting aspects of the entire middle school movement may be the recent discoveries in the areas of intellectual development and brain growth periodization.

Piaget described a period of concrete operations between the ages of 7 to 11 that was followed by a period of formal operations beginning at approximately age 11 and continuing to age 15. During this latter period, the student begins to hypothesize, utilize logic and reasoning in decision making, yet still have some difficulty with concepts such as government, race, or religion as abstract thoughts. Middle school teachers have realized that not all students move from Piaget's concrete stage to Piaget's formal thinking stage at ages 11 or 12 and that concrete examples are essential to the learning process.

The recent studies of Epstein and Toepfer in the area of brain growth periodization not only have substantiated Piaget's thinking from a biological point of view but also have provided further insight into the adolescent's intellectual processes. Epstein discovered that the human brain experiences great growth spurts at certain times and virtually no growth at other times.

Growth spurts occur between ages 2-4, 6-8, 10-12, and 14-16 as a result of cell expansion. Growth occurs at some time during these periods, not necessarily on a given month or day. Between ages 10-12, the average growth in mental age is 38-40 months. Plateaus occur at ages 4-6, 8-10, and 12-14. Between ages 12-14, for example, the average growth in mental age is 7 months.

During these plateau periods, it is felt that students can learn but cannot initiate higher order thinking skills than demonstrated at the growth stage. Teachers, therefore, should utilize skills and levels already achieved, teach skills and processes in addition to content, drop back to the concrete when abstract ideas are not understood, teach new facts and new information within the thinking skills initiated by the end of the 10-12 growth period, devote class time to skill development and self-concept, and provide teaching strategies that actively involve students in the learning process.

SOCIAL-EMOTIONAL DEVELOPMENT

Middle level educators must recognize the social-emotional developmental problems of the early adolescent. Often these problems occur as the body matures and the youngster becomes very sensitive about the changes that have or have not taken place.

The transescent needs help and support in controlling these emotions. Achievements in school may be blocked by emotional disorganization. Major topics in this area of adolescent growth and development include:

Group Membership: The early adolescent feels the need to compensate for the attention previously received from parents in the move toward independence. Groups are important at this stage of development and can be either a positive or negative influence. In many cases, group membership covers up for feelings of inadequacy.

Self-Concept: Earlier perceptions of self are frequently altered by the changes that occur at puberty. It is important for educators to realize that this understanding of self is based on an internal frame of reference and may not be accurate. Self-concept is frequently affected by unkind statements from adults as well as peers.

Ethnic Identification Process: Dr. Geneva Gay suggests that the presence of ethnicity during early adolesence further complicates social-emotional development. For the culturally different students, identity dilemmas result from new demands associated with racial backgrounds. To help minority youngsters, the school curriculum should include structured experiences in social growth and development.

Sex Role Identification: The early adolescent must find out what it means to be a male or female. Although this process begins early in life, it is affected especially by changes that occur now. Pupils wonder if they are normal and if others will like them.

Peer Approval: The peer group comprises the primary social world of the early adolescent; thus, feedback from the peer group is very important. Pressure exists to conform to the group's norms. In return, the group offers security.

Independence From Adults: The search for autonomy is a major developmental task. The early adolescent yearns to be independent; but, in many ways, is very dependent upon adults. Many conflicts arise because parents do not want to grant independence. In most cases, the early adolescent wants standards and adult approval.

Search For Sophistication: The media encourages sophistication at an earlier chronological age. This topic is closely related to self-concept and the search for independence. Adults must realize that this involves much experimentation and that they can provide information as alternatives to certain behaviors and actions.

MORAL DEVELOPMENT

Adults want their children to have instruction in moral behavior, although some may disagree over what is taught or how it is taught. School systems across the nation are becoming more and more involved in moral education or values education programs.

The work of Dr. Lawrence Kohlberg of Harvard serves as the foundation for many of these programs. Kohlberg uses the term *moral reasoning* and suggests that teachers use moral dilemmas with their students. Kohlberg's work is considered cognitive moral development. The term cognitive stresses organized thought processes, the term moral involves decision-making in situations where unusual values come in conflict, and development suggests that patterns of thinking about moral issues improve qualitatively over time. Research in this area is just at the beginning stages. Unfortunately, the link between reasoning morally and acting morally is weak.

The Baltimore County (Maryland) Public Schools recently embarked upon a program of values education based on the theme "1984 and Beyond: A Reaffirmation of Values." As a part of this project, the school system identified ten premises regarding values education and ethical behavior. These premises are:

1. Values education needs to be defined.
2. There should be recognition that a common core of values exists within our pluralistic society.
3. There should be an awareness of the existence of conflicts among acceptable values.
4. There should be a greater awareness by teachers and administrators of the potential role of values in education and of their part in transmitting values.
5. Educators should be aware that values are taught implicitly and explicitly through the curriculum and by practices throughout the school system.
6. Educators should be aware of the values and ethics perspectives of the community as expressed by representatives of the public and private sectors.
7. Educators should understand that society supports an increasingly important role for the public schools in values education.
8. Knowledge gained from research in the field of values education and the developmental stages of children and youth should be applied to our approach to the topic.

9. Goals for the outcome of values education in terms of student behavior and character development should be established.
10. A recognized philosophy of values education and commitment to its implementation should be adopted by the school system and communicated to all related groups.

The middle school organizational plan offers a unique approach to teaching moral development/values education topics. On the one hand, topics can be taught through the various subject areas in the context of existing curriculum. On the other hand, certain topics can be taught through the home-base or teacher/advisory program. Ideally, the interaction of the teaching in content areas as well as the instruction in the home-base area would serve as an excellent reinforcement of the learning process. As students recognize that these topics are being taught throughout the school, they will find it easier to integrate or assimilate this information.

SUMMARY

The middle school movement is a response to the needs of the early adolescent student. Teachers must become familiar with data about the physical, intellectual, social-emotional, and moral developmental needs of these students and then identify the implications of these data to create a model middle school program. The following activity provides the structure necessary for teachers, administrators, and counselors to have that experience.

Activity:

Using information in this chapter as well as other resources on the physical, intellectual, social-emotional, and moral development of the early adolescent, teachers should complete the following chart. After summarizing characteristics for each area, implications of each area should be identified. Finally, the overall implications should be developed using the implications from each of the four areas. Teachers should work in multidisciplinary groups on this activity.

RESPONDING TO THE NEEDS OF THE EARLY ADOLESCENT LEARNER

I. **Characteristics**

   A. **Physical**

      1.
      2.
      3.
      4.

    5.
    6.
    7.
    8.
- **B. Intellectual**
    1.
    2.
    3.
    4.
    5.
    6.
    7.
    8.
- **C. Social-Emotional**
    1.
    2.
    3.
    4.
    5.
    6.
    7.
    8.
- **D. Moral**
    1.
    2.
    3.
    4.
    5.
    6.
    7.
    8.

II. Implications of Each Area

- **A. Physical**
    1. Students need a variety of activities because of their short attention span.
    2. Physical education classes must be adjusted for the varying needs of pupils.
    3.
    4.
    5.
- **B. Intellectual**
    1. Teachers should use concrete examples in concept development.
    2. Pupils should have opportunities for independent study in each subject.
    3.
    4.
    5.

C. **Social-Emotional**
  1. Teachers should receive assistance in developing counseling and communication skills.
  2. The exploratory program should be a vital part of the curriculum.
  3.
  4.
  5.

D. **Moral**
  1. Teachers need to be consistent in their expectations of student behavior.
  2. Literature and social studies programs provide excellent opportunities for teaching moral dilemmas.
  3.
  4.
  5.

III. Overall Implications of All Areas

A. **Curriculum**
  1.
  2.
  3.
  4.
  5.

B. **Organization of the School**
  1.
  2.
  3.
  4.
  5.

C. **Nature of the Learning Environment**
  1.
  2.
  3.
  4.
  5.

D. **Role of the Teacher**
  1.
  2.
  3.
  4.
  5.

E. **Reading Program**
  1.
  2.
  3.
  4.
  5.

3

Delivering the Curriculum to Middle School Students

In addition to learning how to respond to the needs of the early adolescent learner, all middle school teachers should understand the basic fundamentals of curriculum theory for the middle level and then recognize the variety of organizational options for delivering that curriculum to students in grades 6, 7, and 8. This chapter will help teachers recognize that middle school curriculum is a response to the needs of students and that the various organizational options can be studied to identify the organizational plan that is most appropriate for the learning needs of the students in a given school district or individual school.

A MODEL FOR CURRICULUM

William Alexander suggests a model for middle school curriculum that consists of three major components - organized knowledge, skills, and personal development.

1. Organized knowledge refers to factual information contained in the subject matter of all of the courses in the curriculum — English, social studies, mathematics, science, French, Spanish, art, music, home economics, physical education, industrial arts, or any other course in the directory. Middle school curriculum must have a clear focus on factual information because early adolescent students are ready for this emphasis. In addition to learning factual information, middle level students must learn how to secure factual information in future settings, in the classroom, or on an independent basis.
2. Middle school teachers have a major responsibility for teaching skills. The teaching of reading is, of course, one of those skills. The teaching of reading must include emphasis on vocabulary development, comprehension, study skills, and functional reading. Additionally, students must be competent in

writing, computing, listening, and reference skills.

3. Personal development refers to information and activities needed by the early adolescent learner to better understand growth and development. It is felt that the more the early adolescent understands the changes about to occur, the better that student will be in coping with or adjusting to those changes. Each subject area should have topics or units that address the personal development issue. For example, a language arts unit entitled "The Outsider" or a unit in French I entitled "Going To School In France" would help the student learn about developmental problems. Additionally, all of the teachers of the interdisciplinary team or, in some cases, all of the teachers of the school could work together to present the home-base or teacher/advisory program which is also an aspect of the personal development phase of curriculum.

There are two applications of Alexander's model. First, the curriculum for each subject area should include experiences in the categories of organized knowledge, skills, and personal development. The content of every course offered in the curriculum should be subdivided into these three categories. To practice this application, teachers should work by departments to complete the chart below. Only major topics or skills should be listed for each subject at each grade level.

Grade__________________Subject______________________________

Organized Knowledge

1.
2.
2.
4.
5.
6.
7.
8.
9.
10.

Skills

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

Personal Development

1.
2.

3.
4.
5.
6.
7.
8.
9.
10.

The second application involves the function of individual interdisciplinary teams. A team of teachers should make every effort to correlate organized knowledge, skills, and personal development topics in each of the four or five curricula. Correlation helps pupils see the unity or relationships that exist among the topics, units, or subjects being studied. Correlation can and should occur as teachers deliver content, skills, and the home-base or teacher/advisory program. Ideally, curriculum guides should be written on an interdisciplinary basis. If not, teachers should review summaries of their subject areas to create a composite picture of correlations possible. The following chart is an example of how the content in several units in English 7 can be correlated with topics in social studies, science, and mathematics at the same grade level.

ENGLISH GRADE 7

ENGLISH	SOCIAL STUDIES	SCIENCE	MATHEMATICS
1. Stereotypes in Fact and Fiction	Africa	Scientists; Experimenting	Decimals Graphs
2. Designs in Art and Poetry	Africa		Geometry
3. Knights and Champions	Europe	Building Models	Gathering Data; Measurement
4. Conflicts: The Heart of the Matter	Africa; Middle East	Analyzing Data	Probability
5. Communication	Africa; Middle East; Russia	Experimenting	Math Symbols; Word Problems

Students benefit when a team of teachers works cooperatively to teach and reinforce skills. A skill-of-the-week program enables all the teachers on the team to coordinate their efforts to introduce, reinforce, and evaluate a skill taught in the context of each subject area. **Reading and Writing in the Middle School,** a guide to teaching skills for middle level teachers in Baltimore County, Maryland, suggests a number of topics that could be presented over the course of the year as these teachers work together. Topics include:

1. Notebook Organization Checklist
2. Manuscript Form
3. Assignment Sheet
4. Home Study Skills
5. Vocabulary Page
6. Anatomy of a Textbook
7. Reference Materials
8. Methods of Reading
9. Preparing an Oral Report
10. Taking Notes from a Written Source
11. Taking Notes from an Oral Source
12. Conducting Research
13. Bibliographic Format
14. Having a Writing Conference with Yourself: Narration
15. Having a Writing Conference with Yourself: Exposition
16. Punctuation Review
17. Spelling Aids
18. Capitalization Review
19. Independent Reading
20. Test Taking
21. Solving a Problem with Numbers
22. Solving Other Types of Problems

Finally, teachers are also encouraged to work together to deliver the homebase program. The following topics are typically included in such a program:

Decision Making: Throughout the middle school years, students must make choices about their educational future as well as their personal lives. Students are introduced to the steps in the decision-making process which include identifying the problem, generating alternatives, evaluating each alternative, choosing the best alternative, and creating a plan of action.

Resolving Conflicts: Middle school students often find themselves involved in conflicts with others. This unit has been created to help them deal with their feelings in working through these problems. Problems with "being bullied," feeling "put down," making friends, determining values, and identifying potentially irritating situations can be included in this unit.

Careers: Grades 6, 7, and 8 are an appropriate time to begin the process of investigating the world of work. This unit contains materials for teaching about career clusters and matching skills with occupations. This information helps prepare students for the Differential Aptitude Test.

Understanding Myself and Others: The concept of self is redefined and shaped during the middle years. A unit on self-esteem and self-concept enables an early adolescent to explore feelings about self-worth and to evaluate feedback from others.

Communication Skills: The early adolescent may experience difficulty with interpersonal relationships. Therefore, information about verbal and non-verbal communication, openness and trust, and problem solving skills help the student improve in this area.

High School Orientation: Middle school personnel have a responsibility to help eighth grade students prepare for the high school experience. Preliminary registration, final registration, introduction to the requirements for high school graduation, and adjusting to life on the high school campus are topics to be covered.

To help an interdisciplinary group of teachers utilize Application #2 or identify correlations on a regular, systematic basis, the following model is suggested:

A MODEL FOR CURRICULUM

Worksheet

APPLICATION #2

ORGANIZED KNOWLEDGE TOPIC ________________________

English:
Mathematics:
Social Studies:
Science:

SKILL TOPIC ________________________________

English:
Mathematics:
Social Studies:
Science:

PERSONAL DEVELOPMENT TOPIC ________________________

English:
Mathematics:
Social Studies:
Science:

Teachers need to work as a team in order to provide a balanced curriculum that responds to the needs of pupils. They also need to monitor this approach to insure that the curriculum is responsive to the needs of the students.

ORGANIZATIONAL OPTIONS

One of the best ways by which a middle school can be responsive to the needs

of early adolescents is to utilize some form of team planning/teaching in the way the school is organized to deliver instruction to students. Some of the specific reasons for team teaching at this level are opportunities to (1) coordinate the total learning process for youngsters, (2) help students see the wholeness that exists in learning, (3) provide consistency to an age group that is in desperate need of structure and consistency, (4) create a family-like atmosphere in a day and age when fewer and fewer students know the real meaning of the word "family," (5) utilize flexible scheduling, (6) work as a team in teaching and reinforcing a variety of learning skills, (7) provide for the unique guidance needs of early adolescent students, and (8) organize middle level education to be a transition between elementary education and for high school.

Simply stated, team teaching involves a group of teachers providing instruction to a group of students. In some cases, teachers may plan together during common team planning periods but then return to their individual classrooms and work independently with their own classes. In other cases, it may involve teachers in cooperative planning and then actually teaching together. Several classes may be brought together for large group instruction or for an organized, independent study program. The identity of each of the classes may be lost as the total instructional program unfolds. Another example of team teaching could feature small group instruction. In this case, students may be re-grouped according to interests or ability levels regardless of the teaching section to which they were initially assigned. Finally, team teaching could include a group of teachers working together to correlate content and skill development on a regular, systematic basis or to present a thematic unit as they teach different subjects to a common group of students.

There are three basic types of team teaching. The interdisciplinary team involves three, four, or five teachers working together to coordinate instruction in three, four or five different subject areas. For example, an English, social studies, mathematics, and science teacher could work together with four teaching sections to create an interdisciplinary approach to learning the content material in those four areas.

Benefits of the interdisciplinary team approach include:

(1) Students have subject matter specialists for each subject area, but there is coordination of the total instructional program.

(2) Major, thematic interdisciplinary units as well as specific interdisciplinary activities can be provided by the team of teachers to meet the needs of pupils above and beyond the standard curriculum guides.

(3) Teachers can work as a team to better focus on the needs of pupils.

(4) Content is easily correlated.

(5) A skills program is most effective when integrated throughout all disciplines. A skill-of-the-week approach can be designed by the team to meet the learning needs of all pupils.

(6) A personal development or home-base program is best implemented when it is integrated throughout all subject areas and presented by all teachers

of the team.

(7) Planning periods can be used for pupil and parent conferences as well as for coordinating the instructional program.

(8) A discipline code for the entire team can be consistently implemented.

(9) The use of contiguous classrooms permits students to change classes at times decided by a team of teachers without disturbing other classes.

(10) Block-of-time and flexible/modular scheduling can facilitate fundamental aspects of the program.

(11) Sections can be organized on a homogeneous, heterogeneous, or contiguous basis; re-grouping is possible.

There are some other factors to consider in implementing the interdisciplinary approach. Some of these factors are:

(1) The time needed for team planning must come from the teachers' regular work day. In districts that insure teachers one duty free period per day, the team planning period becomes another situation where teachers are not in direct contact with a group of students.

(2) Staffing guidelines may not be adequate for reasonable class size. As teachers are given a duty free period as well a team planning period each day, the average class size figures can increase.

(3) The block-of-time (20-25 periods per week) is a high scheduling priority.

(4) Teachers not included in the interdisciplinary team structure may be excluded from the planning process.

(5) The responsibility of classroom teachers is expanded to include a home-base lesson, the teaching of reading, and/or the teaching of writing skills. Many teachers may not feel adequately prepared for this type of assignment. The teaching contract may set a limit on the number of teacher preparations per day.

(6) The personalities of the teachers involved must be compatible.

A disciplinary team involves two or more teachers of the same subject area who work together to present that course to two or more teaching sections scheduled at the same time each day. The major thrust, obviously, is to find the best way of teaching that course to meet the learning needs of the students assigned to those sections. As an example, two Algebra I teachers could combine their efforts in teaching 50 students. Over the course of the year, the 50 students could be re-grouped between these two teachers according to the students' areas of strengths and weaknesses.

Special features of the disciplinary team are:

(1) The team of teachers plans instruction in one subject area for a group of pupils who can then be grouped or re-grouped for varying purposes

in that subject.

(2) Team meets on a regular basis for planning and evaluating the program.
(3) Program in that subject is tailored to the needs of pupils.
(4) Teachers have an opportunity to specialize within that subject area.
(5) Special programs can be developed for the special needs of pupils in a particular subject area.
(6) A team of subject matter specialists provides instruction in one area.
(7) Department head can coordinate efforts of all teams in that department.
(8) Teachers can teach more than one grade level.
(9) Excellent opportunities exist for curriculum development and implementation at the local school level.
(10) Student has more than one teacher for a particular content area.
(11) Experienced teachers help novices.
(12) Enrichment and remediation can be offered in both large and small group settings.

Potential limitations of single subject teams include:

(1) Pupil needs to adjust to many teachers and perhaps as many as six or seven different teams of pupils and teachers.
(2) Less focus on personal development and less integration of skills may occur; student sees skills in isolation.
(3) Teachers must agree on content of instructional program as well as methodology.
(4) Pupil does not see correlations of various content areas.
(5) Totality of student is sacrificed for specialization in content areas.
(6) More hall traffic is generated.

A third approach to team teaching is frequently called the core/combination subject team. A mini-version of the interdisciplinary team, this model involves two or three teachers of two or three subjects. Examples of the core/combination subject teams are English/social studies/art or English/social studies or art/music. In these situations, the two or three teachers have the opportunity to better coordinate their efforts in delivering the instructional program. Core/combination subject teaming affords more opportunities for large and small group instruction, re-grouping within and between subjects, correlation, and the opportunity for a student to spend more time in one of these subject areas for a limited time period.

In addition to the many advantages of interdisciplinary team teaching, the additional advantages of core/combination subject teams are:

(1) Opportunities for large and small group instruction are provided.

(2) Re-grouping within and between subjects is possible.

(3) Opportunity exists for students to spend more time in one of the subjects for a limited period of time.

(4) Correlation between two or three subjects may be easier to achieve than between four or five subjects.

(5) Planning periods are used to coordinate the total program.

(6) Department heads provide needed leadership.

(7) Planned gradualism is possible.

(8) Horizons of teachers are expanded.

(9) Focus on basic skills and flexible scheduling may be easier to attain.

There are several possible limitations of this approach:

(1) Teachers must be compatible.

(2) Dominance of one subject over another is possible.

(3) Combination may be superficial.

(4) More time may be needed for planning because of increased correlations.

(5) Scheduling priority is high.

The three types of team organization are not mutually exclusive. An overall plan for instruction in a given middle school could involve all three options. In addition to selecting when to use each of the three options, consideration should be given to the number of teachers on a teaching team.

- **SELF CONTAINED CLASSES** - One teacher would be responsible for all of the subjects. In the sixth grade, for example, one teacher would teach English, social studies, reading, mathematics, and science to a class of 26 students. This organizational plan is similar to the elementary school approach. The students would leave that teacher's classroom for art, music, and physical education.
- **TWO TEACHER TEAM** - In this option, two teachers are scheduled on a parallel basis with two groups or classes of students. These two teachers are responsible for the reading/language arts, science, mathematics, and social studies programs for a block of 25 periods per week. Both teachers could teach reading/language arts at the same time, thus re-grouping students according to reading levels. One of the teachers could then teach science to both sections; the other teacher could teach social studies to both sections. These two subjects could be grouped on a heterogeneous or homogeneous basis. Finally, the students could be re-grouped for mathematics according to achievement levels in that subject. Both teachers would be teaching mathematics at the same time.
- **THREE TEACHER TEAM** - Three teachers could be scheduled at the same time for three classes. All three teachers could teach reading/language arts at the same time; students would be assigned to one of these three teachers according to achievement level so that homogeneous grouping is in effect. After

this two hour block for reading/language arts, students could then go to each of the three teachers for science, mathematics, and social studies. One of the three teachers becomes the specialist for each of the content areas. Groupings could be homogeneous or heterogeneous. Teachers have an opportunity to specialize but still work together in planning the reading/language arts program.

- **FOUR TEAM TEACHER** - Using a more traditional secondary model, four sections can work together with four teachers for five content areas. One teacher specializes in language arts; one, social studies; one, mathematics; and one, science. For one given period of the day, all four teachers teach reading, permitting the students to be grouped homogeneously for reading but homogeneously or heterogeneously for the other four subjects.
- **FIVE TEACHER TEAM** - Probably at the eighth grade level, this model would enable students to have five different teachers for five different subjects as part of the preparation for high school. The five subjects would typically be English, social studies, mathematics, science, and French I or Spanish I. Reading could also be the fifth subject on that team.

SUMMARY

Middle school is both a curricular and organizational issue. Alexander's curriculum model is a response to the learning needs of the early adolescent pupil and provides an excellent structure for how teaching teams can function. Each individual school or school district should carefully study the pro's and con's of the interdisciplinary, disciplinary, and core/combination subject team models. Next, consideration should be given to the number of teachers on the team. What should result is a pattern for team organization that reflects that school's or district's approach to delivering instruction according to the unique needs of middle level students.

Activity:
Teachers and administrative/supervisory personnel should answer these questions and then prepare a pattern of school organization. One pattern is included as a sample only.

1. For our school or school system, what are the advantages and limitations of each type of team?
2. For our school or school system, what are the advantages and limitations of a two teacher, three teacher, four teacher, or five teacher team?
3. What is the faculty's preference for an overall plan or pattern?
4. What are the implications of this decision for the teachers of various subjects?
5. How will this plan be shared with parents and students?
6. How will this decision be evaluated? When?

SAMPLE PATTERN

Grade 6	Grade 7	Grade 8
INTERDISCIPLINARY/ 2 TEACHERS English Social Studies Mathematics Science Reading	INTERDISCIPLINARY/ 4 TEACHERS English Social Studies Mathematics Science	INTERDISCIPLINARY/ 5 TEACHERS English Social Studies Mathematics Science Foreign Language
DISCIPLINARY/ 2 TEACHERS Physical Education	DISCIPLINARY/ 4 TEACHERS Physical Education	DISCIPLINARY/ 2 TEACHERS OF EACH SUBJECT Physical Education Industrial Arts Home Economics Art Music
CORE/ COMBINATION/ 2 TEACHERS Art/Music	CORE/ COMBINATION/ 6 TEACHERS Art/Music Industrial Arts/ Home Economics French/Spanish	

4

Role and Function of a Team

A typical middle school will likely have various types of teaching teams - some interdisciplinary, some disciplinary, and some core/combination. Some teams will be relatively experienced, having worked together for several years; others will be in their first year as a team. Some teams may be made up of former junior high school teachers while others may include former high school and elementary teachers.

All teams, however, have the same goal - to provide the best possible instructional program for a common group of strudents. Therefore, it is essential that all teams learn how to work well with each other on a day-to-day basis. Some teams blend quickly; others will need more time and attention. This chapter will suggest an overall format to guide the role and function of a team; the next chapter will describe specific team building activities. All of these activities are suggested to help a group of professionals work efficiently as a team.

WHAT IS A TEAM?

A group of teachers in the process of becoming a teaching team must examine their identity as a team. They can do this by exploring their role and function, extensively at first, and then on a continuing basis as needed.

Team members should be able to determine who they are and why the team exists. Typically, the teachers on a team will have a variety of previous experiences before joining the team situation. They need to explore their commitment to the middle school concept, how they will share responsibilities, and how they will work to support each other before embarking on their adventure as a team. They should know the limits of their local autonomy as a part of a team, a school, and a school district.

Team members need to explore the time commitment they will make. How many team planning periods are provided in the schedule? Will planning time be devoted to team building activities? Will time before and/or after school be needed for team activities?

Another key issue is flexibility. Will the team use flexibility and/or modular scheduling techniques to better meet the unique needs of students? How rigid are the teachers as individuals? To what extent will they have confidence in themselves and their colleagues to develop a meaningful program for their students? How honest will each of them be in communicating with other team members and to other staff members about the team?

The word *team* may have a slightly different connotation for students, parents, and teachers. Students have a strong need to identify with something positive during their early adolescent years. They find it difficult to identify with a total school of 1,000 or more, but they can easily identify with a teaching team of 100-140 students. They want to be part of something important and significant; Team 7D or Team 8A can be a very meaningful identity in the life of a student. To wear a T-shirt or a pin with a team logo is an important event that will not be easily forgotten if the experience is positive.

To parents, the term *team* may be a bit more abstract. Most parents did not attend middle schools and do not know the meaning of the term *team*. If a parent has a positive experience in his/her communication with a team, if a child is always talking in positive terms about what happens in school, or if a parent has opportunities to attend orientation meetings, PTA programs, or special events, the parent will readily develop positive feelings about the team concept. If those events are not positive or are non-existent, the parent may not truly understand the meaning of the word *team*.

For some teachers, a *team* means team planning while in other cases it may mean actual team teaching. Team planning is an excellent professional growth experience. Team teaching, where the teachers actively teach together, can be an even more enriching experience, but is one that should evolve slowly. Teachers must recognize the difference and be comfortable with expectations.

GUIDING THE FUNCTIONS OF A TEAM

Teams of teachers should be given some structure for the functioning of a team. The following planning log, based on Alexander's model for curriculum in the middle school, can provide that structure.

TEAM PLANNING LOG
PIKESVILLE MIDDLE SCHOOL
6A/6B/7A/7B/7C/8A/8B/8C

TEAM GOAL FOR THIS QUARTER: Week of ____________________

____

____

ORGANIZED KNOWLEDGE
SKILLS
PERSONAL DEVEOPMENT
PUPIL ADJUSTMENT
WHAT WE HAVE DONE TO ACCOMPLISH TEAM GOAL
OTHER

____
RECORDER

In the category entitled team goal, each team may enter the goal for that team for a week, a month, or even a quarter of the school year. Teams should be goal-oriented; they should identify needs of the students and then work together to meet those needs. Examples of team goals are:

Activities will be planned to help students make a smooth adjustment from the elementary school to the middle school.

All teachers of the team will work together to teach and reinforce three writing skills.

Home-base lessons will be devoted to two values education topics - human worth and dignity and integrity.

All teachers of the team will reinforce students' efforts to organize their notebooks.

The members of the team will provide extra help at the end of each marking period for students who fail two or more courses.

Teachers will devote one team planning period per week to identify potential correlations within the four content areas.

Organized knowledge refers to efforts by the teachers to correlate subject matter between two or more subjects in the interdisciplinary or core/combination subject team. Examples of entries in this section of a planning log would include:

> The English teacher is teaching a novel that is set during the American Revolution. The social studies teacher will devote several lessons to the historical background.
>
> The art teacher presents a unit on lettering at the same time the English teacher is presenting a unit entitled "Designs in Art and Poetry." Pupils will submit a project to be evaluated by both teachers.
>
> While the mathematics teacher is teaching a unit on probability and statistics, the science teacher teaches lessons on analyzing data.
>
> The French and social studies teachers teach the concept of revolution concurrently.
>
> The art and music teachers will work together to design the scenery for a musical production.

All correlations need not be by units of instruction. Lessons or even segments of lessons can be correlated to help pupils sense the wholeness of learning.

Teams of teachers frequently find opportunities to correlate skills and use those correlations as the basis for teamwork. One successful practice is to create a "skill-of-the-week" for a team. Typical skills to be included are:

Manuscript form
Setting up a notebook
Reading or listening for main ideas
Use of context clues
Following directions
Putting events in sequential order
Outlining
Reading for details
Skim reading
Use of the card catalog in the library
Reading charts and graphs
Writing complete sentences

Students recognize the importance of those skills when teachers work together to introduce, reinforce, and evaluate pupil progress in these areas.

The personal development section is the place to record those activities that help the pupil to better understand himself/herself. Usually, these are home-base or teacher/advisory activities planned by the team of teachers; but, frequently, teachers utilize suggestions in the curriculum guides of home economics, French, Spanish, or English to work together to help pupils understand the various dimensions of the adolescent development process. Examples of personal development activities are:

Orientation to the new school and to the team
Decision making activities
Career development
Resolving conflict
Growing up in various cultures
IALAC (I am Lovable and Capable) activities
Understanding differences between students
Helping the handicapped

Ideally, all team members will work together to present personal development activities. Pupils should not perceive that these lessons are the domain of any one particular teacher.

Teachers should actively care about pupil adjustment. This is one of the major tenents of the middle school philosophy. The team planning log is the place to record the team activities dealing with pupil adjustment without revealing the identity of the students. Entries could be:

Parent conferences (s)

Team met with pupil

Guidance counselor attended team meeting to present data about a new student

Special education teacher met with team to review IEP

Principal met with team to discuss behavior of pupils in the cafeteria

Assistant principal joined team in a meeting with a parent to develop a system of behavior modification for a pupil

Speech therapist met with team to evaluate a pupil's progress

Pupil personnel worker met with team to discuss implications of a social history developed after a recent visit to a student's home

School psychologist visited with team to share information gathered in an educational assessment

Nurse met with team to discuss pupil with severe handicap

This section of the team planning log must protect the confidentiality of the student and the parent.

Teams should keep a record of what they do to accomplish the team goal and include the specific items on the weekly planning log. If the team goal was - "Activities will be planned to help students make a smooth adjustment from the elementary school to the middle school," the following items might be listed:

Each student received an individual schedule. An orientation activity was designed to help students learn how to read the schedule.

Students took a tour of the school. On a map of the school, students marked the rooms in which they have classes.

Each student received a copy of the school rules and specific team standards.

The guidance counselor visited the team and gave an overview of the role of the counselor. Slides were used to illustrate several guidance functions within the school. Students learned how to make an appointment with the guidance counselor.

Several home-base lessons were devoted to organizing the notebook. Following this, individual teachers reinforced those lessons in the context of their content areas.

Entries in the other or miscellaneous categories might be:

Field Trips
Assemblies
Plans for PTA conference night
Meetings with various resource personnel
Planning the administration of standardized tests
Completion of interim reports or report cards
Discussion of homework policies
Planning of registration of students for the next grade

Although this team planning log is most suited for an interdisciplinary or core/combination subject team, it can be useful to guide the single subject team as well. The team planning log can also be the basis for a self-evaluation device to help teams give relatively equal or proportionate amounts of time to the various aspects of their role and function. An example of a self-evaluation process for a team based on the completion of the team planning logs over a period of time is suggested.

PIKESVILLE MIDDLE SCHOOL
ASSESSING THE TEAM PLANNING LOGS

DIRECTIONS: Each interdisciplinary team is asked to review the team planning logs submitted for the first quarter and answer the following questions:

1. Approximately what percentage of time that we have spent in the team meetings has been devoted to correlating content? __________ %
2. How can our team increase the amount of team planning time devoted to correlating content?
3. What skills have we taught through the skill-of-the-week program?
4. What are some skills that we could include during the second quarter?
5. How much time per week do we devote to home-base lessons? ________
6. How many lessons did we do as a team on the values education topic for October? ______________________
7. Are we devoting a reasonable amount of team planning time on organized

knowledge, skills, and personal development? YES/NO Please explain your answer.

8. Are we devoting a disproportionate amount of time to items listed on the log under the headings of pupil adjustment and other? YES/NO Please explain your answer.
9. What are some possible team goals for the remainder of the school year?

SUMMARY

It is vital for each team to examine its role and function. This should be done when the team is formed as well as on an on-going basis. The questions in the activity for this section are typical of the kinds of questions that need to be answered. Time is needed to do them thoroughly; the structure and rapport that result are important to the success of the teaming process.

Activity:

After reading this section, each team should work together to answer the following questions:

1. What is our primary goal as a team? Where can we post this to constantly remind us of our primary goal?
2. What is our definition of the team process?
3. What is our definition of the middle school concept?
4. What is our professional relationship to each other?
5. What is our relationship to the school as a whole?
6. How much time will we devote to the team process?
7. What is our commitment to the concept of flexibility?
8. How will we attempt to develop a strong, positive team identity among our students and their parents?
9. How do we find out if we are expected to do team teaching as well as team planning?
10. How appropriate is the team planning log in this chapter? What modifications might we make for our team situation?
11. How can we determine opportunities to correlate content and/or skills in our team situation?
12. How can we provide personal development activities for the pupils on our team?
13. How can we utilize the resources to facilitate pupil adjustment?
14. How can we continue to discuss and evaluate our role and function as a team?

5

Activities to Enhance Team Effectiveness

Once the members of a teaching team are aware of their role and function, they are ready for a number of team building activities designed to enhance team effectiveness. Team building is a process by which persons learn to work effectively to (1) build and maintain a spirit of trust, (2) set and achieve shared goals, and (3) work simultaneously on tasks necessary to the accomplishment of the goals and ultimate maintenance of the team's trustful climate.

Team building activities include (1) getting to know each other, (2) discussing expectations of other team members, (3) discussing expectations of the team leader, (4) discussing expectations of the guidance counselor, administrators, librarian, and other resource personnel, (5) developing procedures to establish team goals, and (6) determining the consensus needed for team decisions. Each of these areas will be explored in this section.

It is important to differentiate between cognitive and affective concerns when talking about team building, communication, and expectations. A cognitive issue is a factual one which is rather obvious such as, "What was your major in college?" or "Who will be the team leader?" Affective concerns are the feelings behind the facts; and such feelings are frequently beneath the surface. People may feel uncomfortable about revealing these in such questions as "Why do you object so strongly to that option?" or "What are your fears about working in a team situation?"

GETTING TO KNOW EACH OTHER

It is imperative that team members really get to know each other if the team is to be successful. In many cases, team members may have been fairly well acquainted with one another before; now they will really get to know each other as a result of working closely together. When new middle school faculties are created, teachers who don't know each other are placed in a team situation. To help such teachers get to know each other, the following questions may serve as a guide. Some of the questions are cognitive; others are affective.

1. How long have you taught in this school district?
2. What was your previous teaching assignment?
3. Can you tell us something about your family?
4. What are your hobbies and interests?
5. Are you enrolled in a graduate program?
6. What are your feelings about being a member of this team?
7. What are your feelings about the task of this team?
8. What strengths do you bring to this team?
9. What support do you want from this team?
10. What assumptions have you made about the other members of the team?

It is important for team members to be good listeners as well as to be honest in giving answers. The more honest everyone can be, the more likely a positive beginning will be achieved.

It is important also to learn how to share. Sharing of experiences at this level builds a strong foundation for later sharing when the process is so critical to the success of the team. Confidence and trust result from an honest sharing of experiences and feelings. Team members must learn to recognize verbal as well as non-verbal cues. More importantly, team members must learn how to handle these cues in ways that are not threatening to each other. The ultimate goal is for team members to feel both comfortable and honest with each other in all circumstances.

EXPECTATIONS OF OTHER TEAM MEMBERS

As part of getting to know each other, team members should begin to discuss their expectations of other team members. Some team members are looking for academic discussions while others are seeking support in handling discipline. These expectations must be discussed openly and candidly. Questions to be answered include:

1. What is our schedule of meetings?
2. What are the guidelines for lateness, leaving early, or absenteeism at team meetings?
3. How do we identify organized knowledge topics and skills areas to be correlated?
4. How much time will be spent on home-base or teacher/advisory topics?
5. How can we help each other with discipline problems?
6. How will decisions be made?
7. What records of team meetings will be kept?
8. How will we give feedback to each other?
9. How will we evaluate our effectiveness as a team?
10. Are we expected to cooperate on all matters?

11. Is my team relationship more important than the relationship with others in the building? Why?
12. What is it that I really expect from other team members when I have a problem or am upset?
13. How will we work together to establish team goals?

Occasionally, some teams will not jell and their meetings will be little more than occasions for superficial discussions of topics to be recorded on a log for submission to the principal. Most teams, however, will become strong, mutual support systems wherein teachers talk openly and honestly about cognitive as well as affective topics.

EXPECTATIONS OF THE TEAM LEADER

In some school districts, the position of team leader is an appointed position and carries with it a responsibility factor or salary supplement. This person serves as the team leader for the entire year and may be a member of the supervisory team that evaluates teachers.

In other cases, the team leader is appointed by the principal but does not receive any remuneration. In such cases, the team leader is a peer of the teachers and does not serve as an evaluator. Two other options are for the team to select its own team leader and to rotate the position of team leader among all team members during the course of the year.

Obviously, the answers to the following questions will differ according to the process of selecting the team leader. What needs to happen in all situations, however, is a candid discussion of these questions.

1. What do we expect of the team leader?
2. What does the team leader expect from the members of the team?
3. Who is ultimately responsible for the success of the team?
4. What should the team leader do when there is a deadlock on a particular issue?
5. What should the team leader do when members of the team cannot stay on the topic?
6. Should the team leader delegate tasks to members of the team? Why?
7. What is the relationship between the team leader and the administration of the school?
8. What should team members do when they disagree with the agenda for the team meeting?
9. What should the team leader do when one or more members of the team are silent on a particular subject?

EXPECTATIONS OF RESOURCE PERSONNEL

In addition to developing an excellent working relationship with the other members of the teaching team, team members should utilize other resource personnel effectively. Other resource personnel usually include the guidance counselor, administrators, librarian, and reading teachers. In addition to focusing on cognitive as well as affective issues, it is important to consider the relationship between the team (as a unit) and "outsiders" who join the team at certain times for certain purposes. The team should be open to work with the resource personnel.

In discussing the expectations of the team when working with resource persons, it is necessary to consider what the team can do for the resource person as well as what the resource person can do for the team. It is essential that all involved remember the common goal of the entire team process - the improvement of instruction for pupils.

Guidance Counselor

1. How often should the guidance counselor attend team meetings?
2. How can the team help the guidance counselor to be more effective?
3. How can the guidance counselor help the team to be more effective?
4. Should the guidance counselor attend all team planning sessions when parents are involved?
5. What is the role of the guidance counselor in planning the skills and personal development programs?
6. What should the guidance counselor do when he/she strongly disagrees with the actions or decisions of a team?

Administrators

1. When should the principal attend a team meeting?
2. When should the assistant principal attend a team meeting?
3. What can the administrators do to help the team?
4. How can the team help the administrators?
5. Does the fact that administrators evaluate team members hinder the relationship with the team? Why?

Other Resource Personnel

1. How can the librarian, reading teacher, and speech therapist become a part of the interdisciplinary teaching process?
2. To what extent should other resource personnel influence team decisions?
3. How can team members help resource personnel do their jobs more effectively?

It is very important for team members to explore their expectations of other team members, the team leader, and various resource personnel who work with the team on a regular, systematic basis. As a result, the team should be able to enjoy positive working relationships with each other and the various professionals who join the team on occasions.

PROCEDURES TO ESTABLISH TEAM GOALS

Team building activities also include procedures to use in establishing team goals. If all team members work together to create these goals, then they will all work together to achieve them. Goal setting should begin with the total school. Many middle schools establish goals for a school year such as:

- All professional staff members will help to orient new students.
- All teachers will cooperate in implementing various types of teaching teams.
- All teachers will utilize opportunities to teach reading comprehensive skills.

The middle school organizational plan provides an opportunity for a similar goal-setting process to occur at the team level. Each teaching team can identify a number of goals that would enable them to grow professionally or to respond to the learning needs of students. Typical team goals are:

- Increasing the correlation of content
- More effective assessment of skill activities
- More time devoted to home-base activities
- Greater utilization of standardized test scores
- Encouraging students to complete assignments and turn in all work
- Notebook organization
- Listening skills

Whereas school-wide goals tend to exist for an entire year, team goals could be in effect for several weeks, a month, a quarter of the school year, or the entire school year. Teams can establish goals as the need arises. As teams of teachers become goal oriented, the strength of the team will be more obvious and its effectiveness greatly enhanced.

Activity:

1. What topics or concerns are possible team goals?
2. What choices will we make for team goals?
3. How will we assess our achievement of these goals?

CONSENSUS NEEDED FOR TEAM DECISIONS

Another aspect of team building is determining the consensus needed for team decisions. There are many times when the team needs to make a decision and then support that decision as a team when questioned by a parent, a principal, or a student. Most teams have the autonomy to make certain decisions within areas designated by the administration. Arriving at these decisions should help to unite the team and strengthen the relationship between its members.

Consensus is important because team members must take the time to fully discuss certain points and not let the team leader or one member of the team make the decision. All team members should be encouraged to state their opinions or the reasons for their positions. When there are differences of opinion, team members must take the time to understand the rationale of their colleagues and ultimately to resolve their differences.

Examples of decisions to be made by teams of teachers are: whether to change a student from one teaching section to another; whether to take the entire team on a field trip; choosing the skill-of-the-week or the student-of-the-month; choosing a topic and time for a home-base activity; drafting guidelines for student behavior in the classrooms; choosing a topic in English and social studies that can be correlated; or recommending if a pupil should be promoted to the next grade.

Some issues should require a unanimous decision; others can be resolved by a majority vote. What is essential is for team members to determine the majority needed for certain types of situations so they can all ultimately support these decisions. Consensus, again, is needed to build team relationships. If not handled properly, decision making and the lack of support for these decisions can quickly divide a team and hamper its effectiveness.

Activity:

1. What will constitute consensus for our decisions?
2. What will we do when we cannot reach consensus?
3. How will we respond to a team member who cannot support a specific decision?

SUMMARY

Working on teaching teams may be a new and/or even difficult experience for many teachers. Teams will not be cohesive automatically; in fact, teachers need assistance in learning how to work with other teachers on a daily basis.

A number of team building activities were presented in this section. Team members must get to know the other members of their team, discuss their expectations of the others, discuss their expectations of the team leader and various resource persons who work with the team, develop procedures to establish team goals, and determine the consensus needed for team decisions.

All of these activites are designed to bring the team members closer to each other, to enhance team effectiveness, and, ultimately, to provide the best possible instructional experience for the pupils. Coupled with the structure suggested in the previous chapter, team members should be well on the road to functioning effectively by working through these team building activities so that they will feel secure working as members of a team.

6

Building A Block-of-Time Master Schedule

Block-of-time scheduling permits two or more teachers of two or more subjects to teach their classes during the same time period. For example, an English, social studies, mathematics, and science teacher in grade 7 have the same four classes for periods 1 to 5 each day. These teachers have, in essence, a total of 250 minutes of instruction for the 110 pupils on the team. Their common planning period is outside of the block.

A second example involves an art and a music teacher who have the same 54 students period 1 each day of the week. The teachers can regroup the pupils or sub-divide the pupils however they choose. If all pupils are singing in the chorus, the chorus teacher could form a soprano and an alto group. Sopranos would be in music and art together; altos would be in the music and art classes together. On some days, all 54 pupils could be in chorus; on other days, all 54 pupils could see a film or hear a guest speaker in art. The responsibility for sub-dividing the pupils rests with the two teachers involved. No other portion of the schedule is affected once this horizontal block is created.

Block-of-time scheduling is also a factor in disciplinary or single subject teams. Two mathematics teachers may have 55 pupils for Algebra I period 3 each day. The same students must be scheduled with the same teachers each day to permit the re-grouping of pupils based on their achievement or performance in algebra. In physical education, two physical education teachers may have the same 60 students in an instructional team setting. Grouping and re-grouping can be a function of the scope and sequence of the curriculum and the needs of the students.

Some advantages of block-of-time scheduling are:

(1) each teacher can teach his/her curriculum area

(2) teachers can correlate content, skills, or personal development activities

(3) time modules can be adjusted by the decision of the teachers of the team

(4) pupils can have more time in a certain subject if the situation dictates

(5) time modules can be adjusted to the needs of the pupils

(6) films, guest speakers, and assemblies for large groups can be scheduled; yet, each pupil can still see each teacher of the team on that day if the teachers so desire

(7) there is no problem with missed classes if all pupils on a team are going on a field trip or even if one or two classes go on a field trip

(8) standardized testing can be scheduled with minimum disruption

(9) longer science laboratory lessons or introductory lessons for new units in all subjects can be scheduled as a team effort

(10) station teaching can be developed for one or more courses without disruption to the other areas

(11) rotating schedules can be developed for the various sections of the team

(12) provision can be made for independent study programs

(13) two or more subjects can be fused together as a core curriculum; subjects can be inter-related with broad themes or skills approaches.

There is a difference between interdisciplinary team organization and block-of-time. To be an interdisciplinary team, the four or five teachers do not have to be scheduled at the same time. Although it is advisable, it is not mandatory. Block-of-time requires that the teachers involved are, in fact, teaching at the same time. Ideally, all interdisciplinary teams (as well as core/combination and disciplinary teams) will be scheduled on a block-of-time basis.

7A TEAM SCHEDULE

TIME	PERIOD	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:40-9:30	1	Art/ Music	Physical Education	Physical Education	Exploratory	Art/ Music
9:30-10:20	2	7A	7A	7A	7A	7A
10:20-11:10	3	7A	7A	7A	7A	7A
11:10-11:40		L	U	N	C	H

11:40-12:30	4	7A	Art/ Music	7A	Art/ Music	7A
12:30-1:20	5	7A	7A	7A	7A	7A
1:20-2:10	6	Exploratory	7A	7A	7A	7A
2:10-3:00	7	7A	Exploratory	Art/ Music	Physical Education	Exploratory

The coding 7A indicates that the English, social studies, mathematics, and science teachers are available to teach the four sections of the team. There are 23 periods during a week for this block-of-time interdisciplinary program.

When the team is assigned to physical education, there are four teachers available to teach them. Pupils may be re-assigned among the four teachers according to skills, needs, or interests because this is a block-of-time disciplinary team.

There are two art and two music teachers available each time the team is scheduled for art/music. A pupil has art one day and music the next day, but other variations are possible because this is a block-of-time core/combination subject team.

During the four exploratory periods, six teachers are available to teach French, Spanish, foods, clothing, wood, and electricity. Pupils rotate among these six stations every six weeks.

CREATING A BLOCK-OF-TIME SCHEDULE

The master schedule becomes the vehicle to implement the various aspects of the philosophy of the effective middle level school. Team teaching, a curriculum with a strong emphasis on skill development, a teacher/advisory program, and special activities that respond to the needs of students will not be able to achieve their true potential unless the necessary accommodations are made in the master schedule. In most secondary schools, the master schedule is created during the summer months by the principal and/or assistant principals. In the effective middle level school, it is desirable for department heads and team leaders to have an active role in the design of the schedule. In fact, the schedule can be completed before teachers leave for their summer vacations.

The block-of-time is an integral part of the structure of the schedule. Blocks-of-time are needed to accommodate modular scheduling, a process whereby large time periods are subdivided into a number of modules or small-time allotments. Block-of-time is also needed to facilitate flexibility. In the effective middle level school, the master schedule is an overall outline that permits flexible and modular scheduling strategies; individual teaching teams may subdivide 250 minutes into six or seven modules so that students might have a reading program and a home-base activity in addition to classes in English, social studies, mathematics, science, and French. Teams may decide to rotate the sections so that no section has the advantage or disadvantage of having a certain subject first or last period each day. There could be four or five variations of the team schedule and a particular class could meet at several different times during a month.

This model of scheduling features a seven period day for the five days of the week. Lunch is a 30 minute module of time between periods three and four, four and five, or five and six.

BELL SCHEDULE

HOME ROOM - 8:30 - 8:40
Period 1 - 8:40 - 9:30
Period 2 - 9:30 - 10:20
Period 3 - 10:20 - 11:10

"A" LUNCH	"B" LUNCH	"C" LUNCH
Lunch - 11:10 - 11:40	Pd. 4 - 11:10 - 12:00	Pd. 4 - 11:10 - 12:00
Pd. 4 - 11:40 - 12:30	Lunch - 12:00 - 12:30	Pd. 5 - 12:00 - 12:50
Pd. 5 - 12:30 - 1:20	Pd. 5 - 12:30 - 1:20	Lunch - 12:50 - 1:20

Period 6 - 1:20 - 2:10
Period 7 - 2:10 - 3:00

The scheduling model presented can be utilized in either a manual or a computerized operation.

STEPS IN BUILDING A SCHEDULE

_____ 1. *Determine the program of studies for each grade level.*

The first step in building a schedule involves delineating the program of studies for each grade level. Specific courses must be listed along with the number of periods per week the course is offered. In deciding periods per week, consideration must be given to possible teaming options or the clustering of courses.

Grade 6		**Grade 7**	
Subject	**Periods per week**	**Subject**	**Periods per week**
Language Arts/Reading	10	English	5.5
Social Studies	5	Social Studies	5.5
Mathematics	5	Mathematics	5.5
Science	5	Science	5.5
Physical Education	5	Physical Education	3
Art	2.5	Art	2.5
Music	2.5	Music	2.5
		Industrial Arts/ Home Economics/ Foreign Language Exploratory	5
	35		35

Grade 8

Subject	**Periods per week**
English	5
Social Studies	5
Mathematics	5
Science	5
French I or Spanish I or Reading Skills	5
Art	2
Music	2
Industrial Arts/ Home Economics	3
Physical Education	3
	35

____ 2. *Make the necessary decisions on team teaching arrangements.* There are three approaches to team teaching in the middle level school - interdisciplinary, disciplinary, and core/combination. The three approaches to team organization are not mutually exclusive. An overall plan for instruction could involve all three approaches. Additionally, decisions must be made on the number of teachers per team. Teams could consist of two, three, four, or five members. Finally, consideration must be given to the exploratory subjects. Art, music, industrial arts, home economics, foreign language, and physical education teachers can and should be involved in the teaming process. Administrators must find ways to actively involve all teachers in some form of teaching team to achieve the full potential of the middle school concept.

GRADE 6	**GRADE 7**	**GRADE 8**
Interdisciplinary/ 2 Teachers	**Interdisciplinary/ 2 Teachers**	**Interdisciplinary/ 3 Teachers**
English	English	English
Social Studies	Social Studies	Social Studies
Mathematics	Mathematics	Foreign Language
Science	Science	
Reading		

Disciplinary/ 2 Teachers Physical Education	**Disciplinary/ 2 Teachers** Physical Education	**Disciplinary/ 2 Teachers per subject** Mathematics Science Art Music Physical Education Industrial Arts Home Economics
Core/Combination/ 2 Teachers Art/Music	**Core/Combination/ 6 Teachers** Art/Music Industrial Arts/ Home Economics/ Foreign Language	

____ 3. *Create a preliminary registration form.*

The preliminary registration form may be all that is needed for a manual scheduling process; but, for a computerized system, it is only an intermediate form before pupils complete computerized scan sheets. The preliminary registration form can reflect the decisions made on team teaching as well as the course numbers to be used on the final form.

PIKESVILLE MIDDLE SCHOOL
PRELIMINARY REGISTRATION FOR GRADE 6

NAME ______________________ M ____ F ____ ____________
(Last) (First) (Middle) (Present School)
ADDRESS ______________________ ZIP CODE __________
TELEPHONE ______________ BIRTHDATE ______________
(Month (Day) (Year)

______________________________ ______________________________
Father or Guardian's Name Mother or Guardian's Name

______________________________ ______________________________
Work Telephone Number Work Telephone Number

COURSE	PLACEMENT
READING 6	All students are to take a Reading course. The following is recommended for your student: ____ Basic Reading 6 -7401 ____ Reading 6 -7402 ____ G & T Reading 6 -7405 ____ Sp. Ed. Reading 6 -7408

LANGUAGE ARTS 6	All students are to take a Language Arts course. The following is recommended for your student: _____ Basic Language Arts 6 -0811 _____ Language Arts 6 -0812 _____ G & T Language Arts 6 -0815 _____ Sp. Ed. Language Arts 6 -0818
SOCIAL STUDIES 6	All students are to take a Social Studies course. The following is recommended for your student: _____ Basic Social Studies 6 -0821 _____ Social Studies 6 -0822 _____ G & T Social Studies 6 -0825 _____ Sp. Ed. Social Studies 6 -0828
MATHEMATICS 6	All students are to take a Mathematics course. The following is recommended for your student: _____ Basic Mathematics 6 -0831 _____ Mathematics 6 -0832 _____ G & T Mathematics 6 -0835 _____ Sp. Ed. Mathematics 6 -0838
SCIENCE 6	All students are to take a Science course. The following is recommended for your student: _____ Basic Science 6 -0841 _____ Science 6 -0842 _____ G & T Science 6 -0847 _____ Sp. Ed. Science 6 -0848
PHYSICAL EDUCATION 6	All students are to take a Physical Education course. The following is recommended for your student: _____ Physical Education 6 -0900 _____ Adaptive Physical Education 6-7150
ART 6	All students are to take Art. _____ Art 6 -0850
MUSIC 6	All students are to take a Music course. The following is recommended for your student: _____ Music 6 -0860 _____ Chorus 6 -0890 _____ Percussion 6 -0872 _____ Woodwind 6 -0873 _____ Brass 6 -0876 _____ Strings 6 -0877

____ 4. *Determine the grouping procedures.*

It is important to involve the administration and staff in determining the grouping procedures. Overall, there are many benefits to having each teaching team as a heterogeneous group; each team would have pupils of various ability levels. This helps to enhance the self-concept of all pupils and all teams. Specific teaching sections can be organized on a homogeneous or contiguous basis as well as heterogeneously if that is the philosophy of the district or school. In the example below, each interdisciplinary team has four sections. The coding system (fourth digit on the computer form) is:

5 - Gifted and Talented
3 - Above Average
2 - Average
1 - Basic
8 - Special Education

Team 7A	**Team 7B**	**Team 7C**
5-Gifted and Talented	3-Above Average	3-Above Average
3-Above Average	2-Average	2-Average
2-Average	2-Average	2-Average
2-Average	1-Basic	1-Basic
	8-Special Education (parallel scheduling)	

____ 5. *Conduct the registration of students.*

Pupils, under the direction of the faculty or staff, complete the final registration form if they are on a computerized system. Teachers or guidance counselors enter the fourth digit to indicate grouping decisions. Thus, the data are loaded into the registration file.

____6. *Analyze the student request tally sheet.*

A tally must be developed, manually or by the computer, indicating the number of pupils enrolled in each course. In summarizing the enrollment for subjects in a particular grade, the fourth digit becomes very significant. For example,

7401-Basic Reading 6
7402-Average Reading 6
7403-Above Average Reading 6
7405-Gifted and Talented Reading 6
7408-Special Education Reading 6

In essence, each rating is a different course for enrollment purposes. A sample tally sheet would include:

STUDENT REQUEST TALLY PIKESVILLE MIDDLE SCHOOL

	Course Code	Total		Course Code	Total
Grade 6			**Grade 6**		
Reading 6 -	7401	25	Mathematics 6 -	0831	40
	7402	200		0832	170
	7403	100		0833	103
	7405	32		0835	41
	7408	18		0838	21
Language Arts -	0811	25	Science 6 -	0841	15
	0812	200		0842	215
	0813	100		0843	90
	0815	32		0845	37
	0818	18		0848	18
Social Studies -	0821	17	Physical Education 6 -	0900	360
	0822	180		7150	15
	0823	126	Art 6 -	0850	375
	0825	38	Music 6 -	0860	85
	0828	14		0890	146
				0872	21
				0873	80
				0876	23
				0877	20

____ 7. *Study the conflict charts.*

Conflict charts need to be created (manually or by the computer) to determine patterns or combinations of courses in which pupils have enrolled. For example, a Gifted and Talented sixth grader may take any of six music courses. It is essential, then, that all six options be available to pupils. This is important in building the master schedule as well as in assigning pupils to teams. Each pupil must be placed properly for each of the required as well as elective courses. Conflict charts may help to determine which pupils will be assigned to certain teaching teams.

A chart can be developed for each course in the tally. The chart reveals the other courses taken by the students in each course. In this example, there are 35 students in Gifted and Talented English 8. Nineteen are also enrolled in French I, 16 are enrolled in Spanish I, etc.

CONFLICT LISTING

1025 G & T English Grade 8 - 35
1480 French I Grade 8 - 19
1800 Spanish I Grade 8 - 16
2023 America's Past Grade 8 - 5
2025 G & T America's Past 8 - 30
2510 Art Grade 8 - 29
2515 G & T Art 8 - 6
3023 Mathematics 8 - 1
3120 Algebra I Grade 8 - 3
3250 G & T Math 8 - 31
4063 General Science Grade 8 - 5
4065 G & T Science Grade 8 - 30
6310 General Music Grade 8 - 11
6350 Chorus Grade 8 - 15

____ 8. *Decide the composition of teams.*

Teachers need to be involved in designing the blueprint for the composition of the teams at each grade level. Pupils of various ability levels should be properly distributed among the teams, as illustrated in Step #4. All pupils, regardless of their ability levels, should be placed in the elective of their choice. This chart is an extension of the chart in Step #4 and includes the music courses.

ORGANIZATION FOR GRADE 7

	Team 7A	**Team 7B**	**Team 7C**
Ability Levels	5-Gifted & Talented	3-Above Average	3-Above Average
	3-Above Average	2-Average	2-Average
	2-Average	2-Average	2-Average
	2-Average	1-Basic	1-Basic
		8-Special Education	
	(Parallel Scheduling)		
Music	Chorus	Chorus	Chorus
	General Music	Woodwind	Brass
	Woodwind	Percussion	General Music
	Brass	Strings	General Music

In the above example, the music courses are part of an exploratory team in which the 7A and 7B exploratory programs are scheduled on a parallel basis. This enables all students to participate in all music courses.

_____ 9. *Write the table of teachers' assignments.*

Most school districts require that the building principal submit a table of teacher assignments to the superintendent as part of the organizational plan for the forthcoming year. This table will detail the specific assignments for each teacher. For example, Mr. Jones will teach Social Studies 7 to 118 pupils for a 23 period per week block-of-time, have 3 team planning periods per week, have 4 lunch duties per week, and have 5 duty-free periods per week according to the teaching contract. This table should then become a useful tool in developing the master schedule, not just a report for an external source.

_____10. *Develop a tentative schedule by placing courses on daily/weekly schedules by teams.*

Team leaders and department heads should be involved in the actual construction of the schedule. They will be available to make certain decisions about blocks-of-time and then will be able to explain to their team and department members why certain decisions were or were not made.

Using a mosaic approach, the following sub-steps are suggested in developing the master schedule for a sixth grade team. In each case, the teachers are scheduled on a parallel basis. The pattern described is repeated for each team. A record must be kept of the decisions made for those special area teachers who teach more than one team of students.

(a) Place the art/music core/combination subject team (2 art/2 music teachers) on the grid. All pupils of a given team should go to art or music at the same time. In this example, 110 students could be assigned to 2 art and 2 music teachers. One of the music teachers could be an instrumental specialist while the other could handle either vocal or general music. Students would go to art one day and music the next. Pupils could be regrouped between these 4 teachers.

(b) Place the physical education team (4 teachers) on the grid. All pupils of a given team will go to physical education at the same time.

(c) Remainder of the time (25 periods) is devoted to the interdisciplinary team consisting of 1 English, 1 social studies, 1 science, and 1 mathematics teacher. Each teacher teaches that subject to each of the 4 sections of the team on a rotating basis so that each pupil has each subject at least 1 period per day.

(d) For those periods designed as reading, the 4 teachers are joined by 2 additional professionals so that the team of 110 students can be regrouped according to reading levels. Thus, each interdisciplinary team teacher teaches 1 period of reading in addition to the 4 periods of the subject specialty. By adding 2 additional professionals for the reading program, class size is significantly reduced for reading.

(e) Using course numbers and section numbers, this information must then be encoded into the computer for storage purposes.

Interdisciplinary teams can schedule team planning periods when the students are in art/music or physical education. The art/music and physical education teams can have team planning periods when the students are with their interdisciplinary cluster of teachers. Obviously, it is not possible for all of the teachers of the given team to meet while the students are in school. By using creative, flexible approaches to the teachers' work day, times can be arranged prior to the arrival or after the dismissal of students for all of the teachers of a given team to convene.

6A TEAM SCHEDULE

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1	6A	6A	Reading	Reading	Physical Education
2	Reading	Art/ Music	Art/ Music	6A	Art/ Music
3	Art/ Music	Reading	Physical Education	Art/ Music	6A
	L	U	N	C	H
4	6A	Physical Education	6A	Physical Education	6A
5	6A	6A	6A	6A	Reading
6	6A	6A	6A	6A	6A
7	Physical Education	6A	6A	6A	6A

_____11. *Assign pupils to teams.*
By this point in the process, the computer is storing information about the courses requested by each student as well as the times these courses are available according to the tentative schedule developed. The computer could do its initial run to identify the number of students who can successfully be assigned to teams and full schedules, the number that cannot be fully assigned, and the reasons why those not assigned could not be assigned to teams. Manually, pupils can be assigned to teams according to academic levels, electives, and the balancing of classes by sex and race. If a child is not easily assigned, some adjustment can be identified. By the end of the process, each pupil should be assigned to a team, be properly placed academically, and be in the electives requested.

_____12. *Analyze the loading process/assignment of pupils to teams.*
Whether the initial assignment of pupils to teams was manual or by computer, there needs to be a careful assessment of the placement process. Were any student programs incomplete? Why did some classes fill while others did not? How balanced are the pupil loads of teachers in the various departments? Is each student in the proper grouping for each course?

_____13. *Make adjustments to original schedule.*
As a result of the analysis of the loading process and the initial assignment of pupils to teams, it may be necessary to make adjustments to the original schedule. The capacity of certain sections may need to be adjusted; additional sections of art, music, physical education, or industrial arts may need to be created to accommodate the team structure. Certain pupils may alter their requests for electives. As a result, it is likely that there will be changes in the initial proposal of a master schedule. These changes should be made before the schedule is run again.

_____14. *Request additional run(s) of the master schedule.*
An advantage of the computerized scheduling process is the opportunity to run the schedule more than once. After the adjustments to the original schedule are made, additional runs are needed until 100% of the students are placed in all of their courses and the classes are balanced. Typically, several runs are needed to achieve this goal.

_____15. *Assign homeroom sections within teams and/or grade level.*
Pupils on a team should probably be assigned to homerooms on a heterogeneous/alphabetical order basis. The teachers of the interdisciplinary team can serve as the homeroom and/or homebase teachers.

_____16. *Publish the necessary lists.*
Teachers should have class lists for the various groupings and regroupings within the interdisciplinary team subjects as well as art/music, physical education, reading, exploratory, industrial arts, and home economics classes.

_____17. *Orient teachers and students to the master schedule.*
If teachers are expected to make maximum use of blocks-of-time and parallels that exist in the schedule, all teachers must understand how the schedule was constructed and the options that exist. It is also important that pupils should understand the schedule for their team. This is typically accomplished as part of the orientation programs at the beginning of the school year.

Activity:

1. Who is responsible for constructing the master schedule?
2. What other staff members have the opportunity to participate in the process?
3. What guidelines does the school district provide for building the master schedule?
4. What local options does the local school have?
5. What data do we need to gather in preparation for building a master schedule?
6. What is the time chronology for building the schedule?
7. How will the faculty learn about the schedule so that the various teaching teams can begin to function?
8. How will the effectiveness or the master schedule be evaluated?

7

Effective Use Of Planning Periods

Teaching teams need several periods per week for team planning activities. Without team planning periods, it is virtually impossible for a team of teachers to be effective. These team planning periods should be part of the regular work day and should not be taken from duty-free periods that may be guaranteed by the teachers' contract.

Teaching teams may have as many as four or five planning periods per week. Obviously, the more periods for team planning the more productive that team can be. Administrators and supervisors must gear their expectations of a team's accomplishments to the number of periods available for meetings. Teachers must realize too that team planning time is a part of their regular work day and that they are professionally accountable for the use of the time.

RELATIONSHIP BETWEEN PLANNING PERIODS AND THE INSTRUCTIONAL PROGRAM

There is a direct correlation between the use of planning periods and the effectiveness of the instructional program. Almost all that happens in a team teaching situation results from the plans developed during the planning periods.

For example, if an interdisciplinary team is planning to teach a skill-of-the-week such as reading for main ideas in English, social studies, mathematics, and science classes, all of the necessary procedures need to be arranged during the team planning periods. Or, if a physical education team would like to re-group pupils for a gymnastics unit so that the more experienced pupils could be in one group while the novices were divided between the other two instructors, the regrouping process would need to be arranged during a team planning period.

Teachers need to recognize the close relationship between these planning periods and the instructional program. To do this, they need to:

- examine their own course of study to identify opportunities for team teaching - content, skills, and personal development
- share with teachers of other subjects those topics and skills that can be correlated as part of the regular instructional program and which would enhance the learning experiences of the pupils.
- prepare a calendar so these unified learning experiences can be scheduled throughout the school year
- utilize team planning periods to arrange for special activities such as field trips, films, guest speakers to reinforce common learning experiences and/or to serve as culminating activites
- arrange a calandar of teacher-made tests and standardized tests to carefully evaluate pupil progress and attainment of goals.

Without team planning periods, the team process will simply not occur. But even with common planning periods, efforts must be expended to insure appropriate use of these periods. In this chapter, the reader will find a number of suggestions designed to make the planning periods effective.

GROUP DYNAMICS

Group dynamics play a major role in the proper use of planning periods. The interaction of forces within groups as they work to achieve their objectives is the focal point of group dynamics. The needs of individuals should become subordinate to the needs of the group; unfortunately, this is not always the case. In any group situation, certain roles and processes can be anticipated. Benne and Sheets (1948) listed various roles played by individuals in group situations. Some of these are the:

- initiator-coordinator who suggests a new view of the problem
- information seeker who asks for facts and clarification
- opinion seeker who is primarily interested in the opinions of others
- information giver who provides objective data
- opinion giver who states his/her view of the problem
- elaborator who expands the given data and attempts to show how matters will evolve
- coordinator who clarifies and integrates ideas
- orienter who attempts to locate the position and direction of the group
- evaluator-critic who evaluates progress according to logic

- energizer who prods the group into action
- encourager who expresses warmth and solidarity as he/she praises, accepts, and encourages others
- harmonizer who seeks to ameliorate differences and relieve tensions
- expediter who interrupts those who monopolize discussion and tries to involve those who have not yet spoken
- follower who agrees with the actions of the group and provides an audience for the more resourceful
- blocker who tends to disagree or revert to issues already resolved
- self-confessor who uses the meeting as a forum to express irrelevant personal feelings and beliefs
- dominator who is comfortable only when controlling the group
- help seeker who tries to get sympathy by admitting insecurity or confusion
- special interest pleader who acts out the part of a stereotype who inflicts biases on the group

Each team will reflect its own group dynamics, but there will usually be team members who play the parts identified by Benne and Sheats. To enhance the use of planning periods, the following suggestions are offered:

(1) **Accept your placement on the team as well as the other members of the team.** Every middle school teacher may not have the opportunity to choose the other members of his/her teaching team. It is important, however, for a teacher to accept his/her position on a team in a professional way. It is also important to accept the other members of the team in a professional manner. Acceptance is the basis of a good interpersonal relationship among team members. Personality conflicts develop when acceptance and trust are not present.

(2) **Promote exploration of the topic.** All members of the team should actively work to think through or explore all aspects of a topic. Questions that are open-ended help to facilitate exploration. Rather than simply voting to accept or reject a position or opinion of one team member, teachers should explore the pro's and con's of a given topic. Some time limits may need to be established and a procedure for determining consensus is needed; but, this should not occur until all team members have contributed to a comprehensive exploration of the topic.

(3) **Be honest in all communications.** Team members must learn to be honest with each other in all communications. Each team member must learn to be frank in answering questions and/or making comments. Teammates should know exactly what a colleague believes. Other team members should not have to "guess" what the speaker really means. At times, team members are tempted to say what they think other team members or the school adminstration want them to say. Such a rationale will not foster open, honest communication.

(4) **Use of the listening technique of reflection.** A good team member is a good listener. By being a good listener, one helps the speaker to clarify or be

specific about thoughts. Reflection involves paraphrasing statements made by other team members to identify the feelings related to the facts presented or statements made.

The following statements are examples of reflection:

"You are really not sure whether to teach that lesson tomorrow, right?"

"You really disagree with us on that matter, but you are reluctant to say so."

"The two of you seem to feel that we need to talk to the assistant principal about John. John's behavior really makes you angry!"

In these examples, both content and affect are being reflected. Content is simply a summary of what is being discussed while affect describes the feelings or emotions associated with the facts. A good listener reflects both content and affect.

(5) **Arrange the seating to promote good communication.** A circle type arrangement for seating is best. Team members are most likely to sit around a table which assures good eye contact. Guests should be seated in the same fashion as the team members. Parents, for example, should be included in the circle. The team leader should not sit at a teacher's desk with others in front at student desks. Proper seating does much to facilitate equity and good communication.

(6) **Non-verbal cues should be monitored.** Team members should be keenly aware of the non-verbal messages sent out as they talk to each other, to resource persons helping the team, to parents, or to others who attend team planning periods. Team members may be misled by relying on verbal statements without observing that which is not said but is being communicated non-verbally.

The novice, on the other hand, should not be quick to evaluate non-verbal behavior. A particular gesture may mean many things depending on the timing, content of the verbal discussion, or the personality structure of the speaker. On the other hand, the experienced, knowledgeable observer can interpret non-verbal cues in a meaningful way. Much can be learned about an individual from the non-spoken cues, and these non-verbal cues may contribute greatly to understanding that person and the message being delivered.

(7) **Record decisions.** It is important to keep a written record of team decisions. A log may be requested by a school administrator; but, more importantly, it may be useful if a question arises in the future or if a team member wishes to be certain of a decision made. It may also be helpful to distribute the written minutes to the teachers on the team especially if there are assignments for someone to complete.

(8) **Clarify the relationship of the team to the school and school system.** Even though the team may have some autonomy, it must still adhere to regulations of the school and school system. Team members must remember that there are rules and guidelines to follow; they may not do as they please on all matters. Planning is more effective when team members are fully aware of their privileges as well as their limitations.

CREATING AN AGENDA

The team leader should prepare an agenda for each team meeting. This can be posted on a chalkboard, bulletin board, or written for all team members and guests to see.

Some typical agendas for an interdisciplinary team are:

Team 6A - September 15
1. Final adjustments to reading group assignments
2. School nurse to discuss several children with severe health problems
3. Initial discussion of plans for first PTA meeting
4. Evaluation of orientation program and specific follow-up activities in homeroom groups

Team 7B - October 20
1. Assessment of team effort to review functional reading skills
2. Referral of a student for special education services
3. Review of plans for a field trip to the Smithsonian in Washington, D.C.
4. Develop plan for "Following Directions" as the skill-of-the-week
5. Plan for teachers to preview museum display "Life in Ancient Egypt"

Team 8C - December 14
1. Correlate writing historical fiction activities between English and social studies
2. Evaluation of team effort to teach outlining skills in English, social studies, science, and mathematics
3. Plan for home-base activity on conflict resolution
4. Plan for guidance counselor to visit to discuss selection of courses for grade 9
5. Discussion of section change (within team) for Robert S.

Disciplinary or combination subject teams could have agendas such as:

Physical Education Team 6C - November 16
1. Evaluation of soccer unit recently completed
2. Discussion of problems in the locker room area
3. Plans to re-group students for the cross-country unit
4. Plans to record first quarter grades on the report card

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Art/Music Team 7A - December 5

1. Plans for sectional rehearsals in band
2. Plans for a full chorus rehearsal
3. Special schedule of rehearsals in preparation for winter concert
4. Guest speaker in art classes

Team members should help determine the order of items on the agenda and the time limits for each item. If an agenda item is not completed on one day, a time should be established to complete the discussion. Meetings should start and end on time. Conclusions should be put in writing and distributed.

USING SUB-GROUPINGS OF THE TEAM

It is not always necessary for every item of team business to be completed during the designated team planning periods or by all team members. In fact, some items of business or action may be completed by a sub-committee of one or two members. It is important, however, for all team members to agree on the items that can be completed in sub-committee as contrasted with the items that require the presence and the attention of all. Also, recommendations of sub-committees require approval of the full team. It is even possible for sub-groups to meet during the regularly scheduled planning periods. There should be a proper balance between items involving the full team and those that can be relegated to a sub-group so the team feeling or spirit is not lost.

Examples of items that can be accomplished by sub-groups include:

- coordination of plans for field trips
- coordination of plans for assemblies, films, and guest speakers
- scheduling of parent conferences
- coordination of home-base teacher/advisory program
- ditto masters related to home-base teacher/advisory as well as the skill-of-the-week programs
- writing the team planning logs or summaries
- coordinating the use of parent volunteers
- liaison with pupil services team conferences
- publication of weekly, biweekly, or monthly team newsletter

When sub-groups take care of certain items, they should always report to the total team for interim reports as well as final approval or action. Sub-groups utilize the strengths of team members and make the best use of time available for team planning sessions.

INVOLVING PARENTS IN TEAM MEETINGS

Another valuable use of planning periods is to involve parents in groups or on an individual basis. These time periods can be used to orient parents to the teaming process, introduce parents to curricular materials, introduce the skills or personal development activities, or have conferences about the progress or problems of students. Many teams utilize these team planning periods to meet with the parents of a particular child about achievement and/or a problem.

Team members must be alert to the group dynamics of a parent conference. In many cases, this is the first real experience parents may have with the middle school and the teaming process. If the conference goes well, the parents leave with positive feelings about both the school and the team.

On the other hand, if the conference is not handled well, parents may become defensive and hostile. The teachers must be very sensitive to the interaction when parents meet with the team. The following suggestions are offered to help teams have positive contacts with parents:

1. Limit the amount of time a team devotes to parent conferences. If a team has three or four planning periods per week, one or two periods should be the maximum allocation for parent conferences.
2. Limit an individual parent conference to 15-20 minutes under normal circumstances.
3. Parents should be able to see individual teachers without seeing the entire team. Only when every teacher is directly involved should the entire team be scheduled to meet with parents.
4. The team leader should serve as host and moderator of the conference.
5. The conference should begin on a positive, cheerful note. An effort should be made to establish a positive rapport.
6. Each teacher present should make a brief statement about the child's performance. The statement should include some positive attribute or statement.
7. Parents should have the opportunity to react or comment on the teachers' comments. A dialogue should evolve.
8. Teachers must present specific constructive suggestions to help a child grow or improve.
9. Teachers should agree to keep parents informed of further developments.
10. The team leader, or another designated team member, should closely monitor the reaction of the parents. The team leader should intercede when verbal and/or non-verbal cues indicate the need.
11. The team leader should provide closure by terminating the conference on a positive note and/or with an atmosphere of agreement on future goals.

Conducting parent conferences is an important use of team planning periods, but they should not be used at the expense of time needed to conduct other team business.

HANDLING DISCIPLINE PROBLEMS

Team meetings may also be used by the teachers to resolve or at least discuss discipline problems. By developing a consistent team discipline code, focusing on the learning needs of each individual, and taking a positive, preventative ap-

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proach, most problems will be reduced if not eliminated.

Strategies available to the team are:

(1) invite the guidance counselor and administrator to join the team for a case study type of discussion
(2) invite parents to meet with the team to brief them about the problem and solicit their assistance
(3) utilize other pupil services specialists such as the school social worker or psychologist when necessary
(4) develop a behavior modification system utilizing the strengths of the team process
(5) determine if a change of section (within the team) would benefit the student
(6) bring the student into a team meeting to establish goals, priorities, or rapport if needed
(7) issue awards or rewards on a weekly, monthly, or quarterly basis.

Generally, as the team of teachers works together, plans to ameliorate difficulties will emerge.

UTILIZING LOCAL OPTIONS

A major role of administrative/supervisory personnel in facilitating team success is to provide direction and leadership in establishing local options for teaching teams. Local options are those decisions that can be made by individual teaching teams either within guidelines established by the school system or in situations where guidelines have not been established.

The existence of local options may vary from school district to school district or school to school. It is essential that both administrative/supervisory personnel and teachers understand what options exist. Generally, building principals are willing to let teams make decisions that will be compatible with school guidelines. Also, there is a relationship between the process by which curriculum is prescribed locally and the opportunities for local options.

Some areas in which local options might exist include:

- **Correlating content:** Was the curriculum written on an interdisciplinary basis with specific content items to be correlated identified? Or, was curriculum developed on a disciplinary basis although teachers are encouraged to identify opportunities for correlation?
- **Selecting the skill-of-the-week:** Is there a chronological guide listing the skill-of-the-week for each week of the year at each grade level or are teams free to identify the skills appropriate for the students?
- **Selecting topics for home-base activities:** Is there a list of home-base units to be taught each week at each grade level or are teachers free to choose activities they believe students need?
- **Determining the number of periods per week for meeting with parents:** A school or school system may have a guideline for the number of team planning periods that can be used for parent conferences or each team may make its own

determination of how many planning periods may be made available for conferences and how many should be reserved for other team business.

- **Flexible scheduling:** What guidelines exist in the area of flexible scheduling? Are all decisions about scheduling made by the principal or are teams free to make decisions themselves?
- **Re-grouping students for instruction:** Are teams of teachers able to make all decisions about re-grouping independently or must all decisions about re-grouping have approval from a member of the administrative/supervisory staff?

This list of possibilities is not exhaustive; it is just a sampling of the kinds of topics that can be submitted as potential local option decisions. Administrative/supervisory personnel play a key role in determining which items can be handled on a local option basis and also in helping teachers to take advantage of these opportunities. Once these local options are established, administrative/supervisory personnel can monitor the extent to which teachers utilize them and the results.

SUMMARY

A number of strategies for the effective use of planning periods were presented in this section. Teachers must see the relationship between planning periods and the instructional program. Group dynamics play a key role in the success of the teaming relationship. An agenda should be developed for each team meeting. Sub-groupings of the team can meet for certain purposes. Parents can participate in team meetings, and team planning periods can be used to resolve discipline problems. Teachers should be aware of and utilize the local options available to them.

Activity:

1. How many team planning periods exist in our schedule?
2. What are our primary responsibilities as a teaching team?
3. If time permits, what other responsibilities might we assume?
4. How can we monitor the extent to which we implement the eight recommendations for facilitating good group dynamics?
5. Do we have an agenda for each meeting? How is it formulated?
6. When do we utilize sub-groupings of the team? How successful is this approach for us?
7. How effective are our conferences with parents? Do parents leave pleased with the opportunity to meet with the team members?
8. Does the team provide a good forum to resolve discipline problems? Do we support each other when needed?
9. How effective is our utilization of the planning periods? What changes might we make?
10. What are our local options? How can we find out if we have a local option in a given situation?

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Appropriate Teaching Strategies

A discussion of the learning process for the early adolescent student would not be complete without a section focusing on appropriate teaching strategies. The strategies suggested in this chapter are appropriate for all teachers of all subjects, regardless of the presence or absence of any form of team teaching. The strategies described are not necessarily a function of the team approach to instruction; but they are a response to the unique learning needs of the early adolescent student. In schools where teachers are involved in team planning but not team teaching, these strategies should be discussed or explored as a part of the planning process. These strategies should be used on a daily basis in every classroom in every middle level school.

A RESPONSE TO LEARNING NEEDS

Current research on the physical, intellectual, and social-emotional development of the early adolescent student is the basis of these teaching strategies. Early adolesence is a period of great physical growth with pupils at various stages of that growth. Middle level educators must recognize the individual differences and the effects upon attention span of the extensive physical development. Early adolescents not only have a short attention span but also a low tolerance for fatigue.

Students in grades 6, 7 and 8 are also at various stages of intellectual development. Some will leave middle school without ever moving past Piaget's concrete stage. Students, in increasing numbers, will begin to approach Piaget's formal thinking stage during grades 7 and 8. Teachers must be constantly aware of their responsibilities for teaching skills and processes in addition to the content. Teachers should always start lessons with concrete examples and move from the concrete toward the abstract.

In addition to understanding and responding to the extensive physical and intellectual development, teachers must be aware of the implications of the social-emotional phase. Students need to understand the changes taking place in their bodies and minds. Adults must be careful not to reinforce feelings of inadequacy. Hands-on activities will provide a better basis for the retention of knowledge than the lecture. As teachers plan for instruction, they must always keep in the forefront of their thinking the importance of group membership, self concept, peer approval, and independence from adults. Lessons that reinforce these ideas are in fact responding to the learning needs of the students.

Alexander's curriculum model is a basis of many of these teaching strategies. Teachers, working in teams, should correlate content so pupils can see the wholeness of learning. Via association, pupils can link one idea to another and thus be better able to retain those ideas for longer periods of time. Skill development is important in each content area as well as a function of the interdisciplinary team. Skill development is reinforced when all teachers work in unison. Finally, the home base or teacher advisor program should permeate the entire instructional process.

Learning must be viewed as an active process, not a passive one. Students will remember what they *did*. Further, appropriate learning strategies for the early adolescent student must be geared to the individuality of the student and the unique learning style of that individual. Curriculum guides must offer suggestions to teachers as to how to best teach the material to students in a given grade. Learning must be viewed as an active process in mathematics and English classes as well as in industrial arts, art, or physical education classes.

The remainder of this chapter will be divided into three parts. The first segment will present appropriate teaching strategies that should be utilized by every teacher in every subject. The second segment will offer strategies that may be utilized under certain conditions in every subject area of the curriculum. Finally, there will be some suggestions for improving the nature of the learning environment for the early adolescent. Both the physical and emotional aspects will be addressed.

AN APPROACH TO DAILY LESSON PLANNING

As teachers plan for instruction for every lesson for every day, the following teaching strategies are suggested to best meet the learning needs of the early adolescent student.

1. **Plan lessons that divide the entire period (40 to 50 minutes) into four or five modules or segments of 10 to 15 minutes each.** In preparing for in-

struction, a physical education teacher would normally subdivide a class period into a number of smaller units of time. In the first eight to ten minutes of the period, students change from their regular school clothing to their physical education attire. Pupils, for the next five minutes, assemble in the gymnasium and participate in appropriate warm-up exercises.

After re-assembling in instructional groups, the teacher might demonstrate a new skill in the basketball unit. Following this demonstration, pupils would spend ten minutes practicing the new skill in small groups. For the next thirteen minutes, pupils would follow a round-robin format to practice a number of skills in the basketball unit. For the next four minutes, the teacher would re-assemble the instructional group for a summary and an assessment of the skill development process. The final eight minutes would be devoted to showering and dressing in regular school clothes for the remainder of the school day.

In mathematics, the class period might be divided as follows:

8:40-8:50	Pupils arrive and work on a drill on multiplication of decimals
8:50-8:55	Teacher checks the drill; pupils assess their performance on this activity
8:55-9:02	Homework is checked; pupils assess their performance on this activity
9:02-9:15	Teacher introduces new work on the multiplication of decimals; pupils participate in an inductive process and help to write the rule for this situation when multiplying decimals
9:15-9:25	Students complete classwork activity based on the new skill presented; work is checked
9:25-9:28	Students participate in a summary of the lesson; students answer teacher's questions related to the skill, the concept, and the application
9:28-9:30	Teacher assigns homework and dismisses class

In these two examples the teachers subdivided the time available for classroom instruction into a number of modules. The modules were of varying length and clearly depended upon the specific activity to be completed. The same general approach can and should be utilized in all subject areas.

2. **Provide clear, concise structure for all activities.** In all subject areas, pupils must know exactly what to do for each specific activity. A foreign language teacher planning a vocabulary activity must review the directions orally and also have them written on the chalkboard so that students may refer to these directions while completing the activity in the event that a question arises.

As teachers plan lessons, they must anticipate the kinds of questions students will ask as students attempt to complete the activity. In many cases, it is helpful for the teacher to complete the activity before asking students to do so. Instructions should be given on a step-by-step basis. Teachers should not assume that all students can see the inter-relationships between these steps.

Flow charts are helpful when teachers are presenting a series of tasks to students. Early adolescent students can perform a variety of assignments when teachers have given clear, concise, specific directions to students and when the number of items to be completed in the series is not excessive.

3. **Provide variety within the period.** As teachers organize instruction for the total 40 or 50 minutes of the lesson, they must plan to provide variety for the students so that the students are not doing one continuous learning task. In foreign language, for instance, the lesson can include a vocabulary activity, an oral grammar activity, a written grammar activity, and a culture activity that involves viewing a filmstrip. Variety is achieved by having the various phases of the foreign language program accomplished within the given period as well as having a balance of oral and written activities within the period.

A teacher of English can also provide for variety by planning four segments that could include a written grammar drill, a listening activity related to the grammar program, a writing activity related to the literature program, and an opportunity for sustained silent reading. Again, variety is achieved by subdividing the time, by alternating the activities between written and oral, by addressing all phases of the English/Language Arts curriculum, and by correlating the various elements of that curriculum into a meaningful whole.

All subject area teachers must recognize the importance of providing variety to sustain the interest and enthusiasm of students. The need for variety is closely related to the attention span limitations of students. This is important in terms of time, types of activities, and the inter-relationship of the elements of the curriculum. By recognizing the importance of variety, middle school teachers are responding to a major learning need of the early adolescent.

4. **State purposes for each activity.** Pupils must know exactly why they are being asked to complete a certain activity. The social studies teacher must tell the students why they are completing a map to show the route of the Lewis and Clark Expedition. The science teacher, in preparing the students to do a lab experiment, must review the importance of safety so the students can practice the safety habits as they work with the Bunsen burner. In mathematics, pupils must know the importance of studying percent.

Once students know these purposes, they are more willing to participate in the activities. More importantly, they are able to assess their performance in relationship to these purposes. Without a stated purpose, students are not aware of the importance of a given activity and may not show the necessary enthusiasm for completing that activity.

5. **Provide adequate motivation, readiness, and goal-setting.** Once purposes are established, teachers must make an overt effort to enhance the motivation and readiness of the students. A specific effort to get the interest of the pupils in the lesson topic is often needed. For example, a lesson in social studies could start with a picture as the motivational activity; the industrial arts teacher could show the pupils an example of the finished product as a motivating device. Realia, pictures, maps, and items from the daily newspaper frequently serve as motivational devices.

It is important for the teacher to monitor the students' response to the motivational activity. In developing the lesson, teachers must make an effort to relate the motivational activity to the purposes of the lesson. This is most frequently accomplished by pre-planning several key questions to establish this relationship.

Readiness is similar to motivation and yet in some ways is different. Generally, the teacher is working to prepare the student to learn new material. Effective readiness in the middle grades includes preparation for both the content and the skill being presented. A social studies teacher who is providing motivation and readiness for a reading selection on the causes of the Civil War would prepare students for the content material in the textbook and would prepare youngsters for a reading skill such as reading for main ideas or cause and effect relationships. Readiness for the content and the skill could be accomplished concurrently.

Both motivation and readiness are part of a larger concept entitled goal-setting. Instruction for middle level students must be goal-oriented; and there should be both long and short range goals. Teachers, as they organize a unit of study, must list both long and short range goals; and, more importantly, plan lessons to include short range goals that help to achieve the long range goals.

6. **Utilize recall strategies.** Middle level teachers must make a special effort to utilize recall strategies. Recall strategies help the student to connect material to be learned with material already learned. For example, the current lesson should begin with several questions that summarize or review the previous day's lesson. Teachers must remember that 24 hours have passed since the student was last in that classroom. The student attended six other classes since yesterday's lesson, and participated in many events outside of school. Recall, therefore, is essential.

Recall is effectively accomplished via a series of open-ended questions that help the student see the connection between prior learning and the goals of the current lesson. Drill questions and checking homework are other strategies to accomplish recall. An effort also must be made to help students who were absent for the previous lesson quickly receive a synopsis of that lesson.

7. **Transitions must connect the various activities within the lesson.** An effective lesson for middle school students consists of several activities designed to accomplish a specific goal or goals. Although the teacher may easily see the relationship between these various activities, it is essential that the students recognize the relationship. Thus, transitions should be used to make connections evident to the students.

A transition consists of a summary statement of the previous activity, a preview of the next activity, and a statement of the relationship between the two parts. The approach should be inductive whenever possible. An English teacher might complete a discussion of the character study of one of the individuals in a short story and then make the transition from the character study to a written activity related to a major literary theme. Via questions, students will be able to participate in the summary of the character study, gain a preview of the literary theme, and be able to describe that relationship. There must be a transition between every activity in every lesson so that pupils are always aware of the relationship between the parts.

8. **Be flexible within the structure.** Middle school teachers need to be structured. Effective middle school teachers spend a considerable amount of time planning lessons that properly challenge middle grades students.

Yet, within this structure, teachers need to be flexible. There will be times when questions arise or, as the teacher assesses a specific activity, that it will become apparent that there must be some deviation from this plan or structured approach. A student may ask a question that must be answered. A group of students may not fully comprehend a concept, and thus it is necessary to reteach that concept. It is also possible that the students' frustration level is so great that the teacher needs to inject some humor in the lesson or perhaps delay an activity until a more appropriate time. Another example of the need to be flexible is when a conflict arises in the cafeteria or corridors, and class time needs to be devoted to resolving that conflict so that the students can continue with the primary task of learning. Effective middle school teachers must be flexible within a structured approach to teaching.

9. **Know the cognitive level of the students in each classroom.** Just as teachers are aware of the reading and IQ levels of students whom they teach, effective middle school teachers should also be aware of the cognitive levels or the brain growth stages of each student in each class.

Students in grades 6, 7, and 8 may be at one of the following stages of cognitive development: pre-operational, concrete onset, concrete mature, formal onset, and formal mature. Obviously some testing or screening using materials such as those developed by Michael Shayer, Patricia Arlin or others will be necessary to help teachers identify these levels. This information should not, however, be used as part of an effort to group students homogeneously for instruction.

Teachers should, on the other hand, call upon students at appropriate times in light of the cognitive level of the student. It is helpful to direct the more concrete questions to students who may be at pre-operational or concrete onset. Questions that involve more abstract thinking should be asked of those who are at concrete mature, formal onset, or formal mature stages.

Teachers also have a responsibility to help expand the cognitive levels of students. Answering higher order questions will help students to expand their thinking. The maturation process is long and arduous; some students may never reach formal mature. Nevertheless, the effective middle school teacher should recognize the cognitive levels of individual students, ask questions that are appropriate to that level of development, and generally be committed to helping students expand as possible.

10. **Move from the concrete to the abstract in the concept development process.** As teachers begin lessons or, more specifically, as teachers start activities within lessons, concrete examples should be offered. Lessons should move from the concrete or specific to the abstract or more general and more theoretical.

Concrete examples are specific and exact. A picture, a model, an advertisement, or a slide can be used to begin the thought process. Teachers should enable students to see, feel, or touch these concrete examples. Teachers should also ask knowledge and comprehension questions to assess the students' understanding of the concrete example.

As the lesson or activity continues, students should move toward the abstract. Examples of abstract ideas include democracy, communism, photosynthesis, the associative law, irony, and nuclear energy. In guiding student comprehension and learning, teachers must move slowly and assess student comprehension at regular intervals. Students need help in applying ideas in new but similar situations. Ehrenberg points out that, "One who has conceptualized...is able to consistently identify new examples, create new examples, distinguish examples from non-examples, change non-examples into examples, and, in every case, is able to explain what he/she has done by citing the presence or absence of the concept characteristics."

The Cognitive Level Matching project (CLM) in the Shoreham-Wading River School District was designed to teach teachers about child development theory and to help teachers design teaching strategies for integrating these principles into their teaching. Teachers are taught to assess the cognitive levels of students, the cognitive demands of the curriculum and, where discrepancies exist, create a better, more appropriate match. The program is based on the premise that students do not achieve because of frustrations that develop as a result of being subjected to curriculum that is inappropriately matched to their cognitive ability. Teachers who are aware of the cognitive levels of their students and who plan lessons that move from the concrete to the abstract are, in effect, working toward the same aims as the CLM program.

11. **Construct effective questions to accomplish the objectives of the lesson.** In preparation for instruction, teachers should plan certain key questions and list them in the formal written lesson plan. The questions should be open-ended and cause pupils to think prior to responding. As teachers reflect upon their questioning techniques, they should answer the following questions on a self-assessment basis.

- Are my questions clear and concise?
- Do my questions help to achieve the objectives of the lesson or activity within the lesson?
- Do I ask one question at a time?
- Do I ask each question only once?
- Do my questions elicit concepts as well as facts?
- Do I call upon a student after the question has been asked?

As teachers analytically answer these questions, they will be working toward the improvement of their questioning techniques.

Teachers should also recognize that there are levels of questions and that these levels reflect Bloom's Taxonomy. Questions can be considered on six levels as exemplified on this checklist developed by the M.O.S.T. Unit in Baltimore County, Maryland.

QUESTIONS CHECKLIST

I will ask questions in my lesson today that require my students to utilize various levels of thinking in answering the questions. The students will be able to demonstrate that they —

Knowledge Level
_____ know common terms
_____ know specific facts
_____ know methods and procedures

_____ know basic concepts
_____ know principles

Comprehension Level
_____ understand facts and principles
_____ draw conclusions
_____ interpret material
_____ translate verbal material to mathematical formulas
_____ estimate consequences implied in data
_____ justify methods and procedures

Application Level
_____ apply principles to new situations
_____ solve mathematical problems
_____ demonstrate correct usage of a procedure

Analysis Level
_____ analyze the organizational structure of a work
_____ recognize unstated assumptions
_____ recognize logical fallacies in reasoning
_____ distinguish between facts and inferences
_____ evaluate relevancy of data

Synthesis Level
_____ write a well organized theme, speech, and/or story
_____ propose a plan for an experiment
_____ integrate learning from several different areas into a plan for solving a problem
_____ formulate a new scheme for classifying objects

Evaluation Level
_____ judge the value of work by internal and/or external criteria
_____ judge the consistency of written material
_____ judge the adequacy with which conclusions are supported by data

Questions are often the key to the success of a lesson. Teachers must critically evaluate their skills in asking questions according to the specific objectives of a lesson or activity. Questions play a major factor in moving from the concrete to the abstract and facilitating the learning process.

12. **Use wait-time effectively.** Wait-time is defined as the length of the silent period following the asking of a question and prior to the initial student response to that question. The average teacher waits for an answer for only one second. A longer wait-time has been found to have a positive effect on the quality of the teacher-pupil interaction and achievement in science lessons. Teachers should extend pauses before beginning explanations, giving directions, asking questions, or reacting to pupil talk. These pauses give students additional time to formulate an answer, and thus there is a greater chance for more students to participate in the ensuing discussion. By increasing the wait-time to five seconds, teachers may anticipate the following results (1) student responses lengthen, (2) whole sentence replies are given, (3) student questions increase, (4) teacher expecta-

tions of students are revised, and (5) teacher questions show more variability.

13. **Teach reading skills as part of an organized, systematic process.** All middle school teachers are or should be teachers of reading. Throughout the school year, every teacher should make an effort to teach the following reading skills in the context of that subject.

READING SKILLS - MIDDLE SCHOOL

A. Vocabulary

1. Shows knowledge of basic sight vocabulary
2. Uses context as a clue to word meaning
3. Uses phonics skills as an aid to pronunciation and word meaning
4. Breaks down words into syllables as an aid to pronunciation and word meaning
5. Uses prefixes, suffixes, and roots as an aid to word meaning
6. Understands multiple meanings
7. Understands figurative expressions (e.g., idioms, similes, and metaphors)
8. Understands pronoun references
9. Understands word relationships (e.g., antonyms, synonyms, and homonyms)
10. Understands use of the dictionary to obtain word meanings and pronunciations
11. Distinguishes between concrete and abstract terms
12. Classifies items and terms

B. Comprehension

1. Recalls details for various purposes
2. Determines sequential order
3. Finds the main idea of a passage
4. Identifies ideas implied but not directly stated
5. Understands the relationships (e.g., time, place, cause and effect, and analogies)
6. Interprets the mood of a situation, story, or poem
7. Draws conclusions and predicts outcomes
8. Distinguishes between fact and opinion
9. Recognizes mass persuasion techniques
10. Generalizes comparisons and contrasts

C. Study Skills

1. Uses parts of a book
2. Uses reference books and periodicals
3. Uses library resources to obtain information
4. Takes notes about a topic
5. Makes an outline to summarize information
6. Identifies author's attitude and purpose
7. Evaluates information for validity
8. Adjusts rate of reading according to type of material and purpose for reading

D. **Functional Reading**
   1. Follows directions
   2. Locates information
   3. Gains information using main ideas
   4. Gains information using details
   5. Understands forms
   6. Selects reading as a personal activity

E. **Oral Reading**
   1. Uses oral intonation patterns
   2. Uses punctuation as a clue to the proper reading of a sentence
   3. Uses voice to interpret feelings and moods of characters
   4. Uses correct phrasing

Adapted from: *Planning for Reading Instuction K-6*
Baltimore County Public Schools

In addition to developing a comprehensive perspective of the reading skills to be taught in grades 6, 7, and 8, middle school faculties should develop a consistent approach for teaching a directed reading lesson. This format should be utilized in all subject areas and include the following elements: (1) motivation/readiness for the content as well as the skill, (2) vocabulary development, (3) specific purpose(s) for silent reading, (4) silent reading, (5) discussion of purpose questions, and (6) follow-up activities.

14. **Provide a summary or assessment.** There should be a summary and/or assessment at the end of each activity as well as at the end of a lesson. Assessment can be achieved via a specified activity or a series of directed questions. The assessment or summary should help pupils recognize what they learned during that lesson as well as what will happen next in the learning process. Assessment can be on a group as well as an individual basis. All student questions and concerns should be addressed prior to dismissing a class.

UNIQUE STRATEGIES FOR CERTAIN CONDITIONS

In the previous section, a number of teaching strategies were suggested that can be utilized by every teacher in every subject area as a teacher plans for instruction. In the next segment, some additional strategies designed to meet the unique needs of the early adolescent students will be presented. In contrast with the fourteen suggestions in the earlier discussion, these may only be applicable for certain subjects or in certain situations.

1. **Student-to-student interaction.** Traditional secondary teaching has been characterized by a pattern of teacher statement followed by student statement. This is exemplified by the teacher asking a question, a student answering a question, and then the teacher asking the next question.

Lomax and Cooley (1981) found that there were interesting differences in achievement outcomes when students spend a great deal of time discussing, answering questions, listening, and engaging in other types of classroom interactive activities. The middle school classroom should feature as many opportunities as possible for student-to-student interaction as a response to the learning needs of the early adolescent. Students should interact with one another on mathematics problems, science laboratory experiments, building charts and graphs in social studies, and discussing the plot of a novel in English. Wherever possible, the classroom activity should also permit physical movement to reduce the restlessness that characterizes this age group.

2. **Team tasks.** Team or small group tasks are an extension of student-to-student interaction and usually involve groups of students working on a specific academic task. This approach is a response to the social-emotional development of the early adolescent student and must be carefully supervised by the teacher to keep the competitive aspect in control. This can be highly motivational for the student who needs peer pressure to perform. The focus should clearly be on the group rather than on the individual. Teachers of all subject areas are encouraged to find opportunities for team tasks.

3. **Team approach to skill development.** When teachers are working on interdisciplinary teams, they should work together in a skill-of-the-week approach to skill development. In addition to teaching skills in each subject area, students benefit from the motivation and reinforcement of the team approach. While it is more difficult to correlate content on a regular basis, students can clearly see the benefits of this approach to skill development.

4. **Simulation and game techniques.** Early adolescent students thoroughly enjoy opportunities for simulations and games within the structure of the classroom. Social studies teachers have numerous opportunities to create simulations to teach topics in history, economics, or sociology. Industrial arts teachers utilize the assembly line process as an excellent simulation. Home economics teachers use numerous simulation approaches for teaching family life topics as well as decision-making.

These simulations and games give students a chance to actually experience the topic being discussed. After the simulation or game experience has been completed, the teacher should ask numerous questions to help students comprehend and analyze that which occurred. The real learning takes place in the post-simulation discussion. A number of educational games are available commercially and are applicable to the middle grades curriculum.

5. **Use of the inductive method.** Much teaching at the secondary level is of a deductive nature and involves the teacher explaining to the students the rule or principle in effect. On the other hand, inductive teaching allows the students to discover the rule by examining some data or examples and answering a number of key questions presented by the teacher. For example, an English teacher may present a grammar rule on punctuating items in a series by having a number of sentences on the chalkboard or overhead projector that need to be punctuated. Via a careful questioning approach by the teacher, pupils will discover where to place the commas and why the commas were or were not in certain situations. This process culminates with the writing of a rule which is really a summary of the learning experience provided. Topics in mathematics, science, foreign language, and other subject areas can be presented inductively. In planning inductive lessons, the teacher must be keenly aware of the learning process. Infor-

mation learned inductively is retained longer than materials presented deductively.

6. **Independent study.** As a supplement to traditional classroom instruction, middle school students benefit from opportunities for independent study. Independent study allows students to move at their own pace, explore areas of interest, or work with a group of peers on a project of mutual interest. Independent study can be arranged by the individual subject area teacher with the librarian often playing a key role in facilitating this program. Independent study is intended to supplement traditional instruction, not replace it.

7. **Peer teaching/peer counseling.** Middle school students can be used as peer teachers and peer counselors. Students can conduct certain parts of the lesson such as checking the drill or the homework as well as preparing materials and/or a mini-lecture for their peers on a given topic. Students can also play a major role in group counseling activities by serving as the group leader. Teachers and guidance counselors ought to find additional ways for peer teaching and peer counseling as a constructive response to social-emotional development.

8. **Enrichment for formal thinkers.** Students who are capable of handling higher levels of abstraction might not receive the necessary challenges in certain classes. Since most students require more concrete approaches, instruction must be aimed at the majority of the students. Every teacher, therefore, has a responsibility to find some appropriate ways of challenging the formal thinkers. This can be accomplished by reserving certain questions for these students, letting them do independent study and reporting to the class, assigning supplementary work, and assisting the teacher whenever possible.

NATURE OF THE LEARNING ENVIRONMENT

The final section on appropriate teaching strategies will include suggestions for improving the nature of the learning environment for the early adolescent. Physical and emotional aspects will be considered.

1. **Decorate classrooms appropriate to the subject(s) being taught and the age(s) of the students(s).** The environment of the middle school classroom should be an extension of the elementary classroom. Bulletin boards should reflect topics of study as well as other items of importance to students of that age group. Mobiles and plants add to the environment of the classroom. The goal is to establish an inviting environment for learning.

2. **Utilize flexible scheduling techniques.** Pupils benefit when flexible scheduling is used. Members of the interdisciplinary team should identify opportunities for flexible scheduling and utilize those whenever possible. All lessons do not have to be for fifty minutes; special activities can be scheduled along with the traditional curriculum.

3. **Anticipate and prevent problems.** In planning a lesson, field trip, or special activity for the team, teachers should anticipate potential problems and then work to prevent them. Anticipation of problems is a fundamental part of the planning process.

4. **Encourage risk-taking.** Middle school students grow when they have the opportunity to take risks in a secure, protected environment. Risk-taking can occur in a reading class, a physical education class, or a science lab. Students,

although initially leary of taking a risk, will take that chance when the student-teacher rapport is positive. A caring teacher encourages students to take risks. Students learn when they take risks in a positive fashion.

5. **Focus on affective issues.** In addition to presenting content material to students, middle school teachers should also address affective or emotional topics that come up in the course of the learning process. The science teacher may need to take a few minutes from the explanation of a scientific principle to resolve an altercation between two students in that classroom. A student who may have experienced some abuse at home the evening before may feel comfortable sharing that with one of his or her teachers. A discussion of a novel in English may well prompt a student to share some personal experience with either the class as a whole, a small group of students within that classroom, or with that teacher on a one to one basis. Teachers should be concerned with affective issues, not just their subject matter.

6. **Inject humor whenever possible.** Teachers need to find opportunities to inject humor into the lesson. Even ''silly jokes'' are appreciated by students and help students to remember the content material. Humor should always be in good taste and never at the expense of a student or another faculty member.

7. **Praise, don't criticize.** Middle school students respond to praise. Teachers must take the necessary time to find the way to praise students in a manner that is accepted and respected by the student receiving praise as well as others in the classroom. Teachers must use a variety of terms in dispensing this praise so as not to make the words seem too mechanical. Middle school teachers are quick to point out the shortcomings of their students; on the other hand, teachers and teams should find ways to inform parents of the positive accomplishments of the students. Praise reinforces and facilitates learning.

SUMMARY

Current research on the physical, intellectual, and social-emotional development of the early adolescent student suggests a number of appropriate teaching strategies. This chapter presented a number of suggestions that can be utilized in daily lesson plans, that may be utilized under certain conditions, and that can enhance both the physical and emotional aspects of the learning environment. Middle level teachers must assess themselves to identify which of these strategies they are already using and which can be added to their repertoire.

Activity:

1. As an individual, which of these strategies am I already using? As an individual, which of these strategies would I like to add to my repertoire?
2. As a team, which of these strategies are we using sufficiently? Which additional strategies would enhance our effectiveness as a team?
3. What staff development activities would help our team and faculty grow professionally in this area?

9

Using Flexible Scheduling Techniques

Another key to the success of the teaming process is the extent to which teachers use flexible scheduling techniques. Traditionally, the schedule in junior and senior high schools is characterized by sameness. The order of the classes is the same; the time duration for each of the classes is the same. This condition is the result of the requirements of the Carnegie units and tradition. In the senior high school, the principal must certify that a student had each class for fifty minutes per day as part of the college admissions process. Because ninth graders accumulate credits toward graduation from high school, the structure of the high school affected the junior high school. Junior high teachers were unable to shorten or lengthen a class period, change the number of periods in a given day, change the order of the periods within the day, or do other special innovative activities because each class had to be fifty minutes in accordance with the Carnegie units.

In the middle school, such rigidity is not necessary. Even if ninth graders are assigned to the middle level school, the concept of flexibility can be implemented in the other grades. Flexibility is a response to the rapid physical growth, the short attention span, the problem of fatigue, and the fact that students are at different stages of development. Without the presence of Carnegie units, middle school teachers can plan the instructional program according to student needs.

WHAT IS FLEXIBLE SCHEDULING?

The term *flexible scheduling* suggests that the order of each day need not be the same. Group size can vary, the order of the periods can vary, and the length of each period can vary. Flexible scheduling is not a concept that can be mandated by the school administration. Rather, once the provisions for flexible scheduling are put into place, it is up to the teachers to take advantage of the opportunity to be flexible in the planning of daily, weekly, or monthly schedules.

Flexible scheduling is a way of responding to the developmental needs of the early adolescent. As the student goes through the various physical and mental changes, his/her attention span varies. Some lessons should be 30 or 35 minutes in length; some lessons, if planned properly, can be 60-65 minutes.

A student should not always have algebra seventh period of the day. If a student has physical education each day of the week, it would be helpful to have the class in the morning on some days and the afternoon on other days.

Variety is important for teachers and students. Although flexible scheduling requires many decisions by teachers about student needs, content, and even teaching strategies, the approach should be viewed in light of the benefits for students.

Flexible scheduling should also be viewed as an excellent way to achieve the structure needed for the total team program. In order to have a reading program, a home-base or teacher/advisory program, special assemblies, a strong skills program, and other activities, it is necessary for the team to make some decisions about how time will be allotted for those various activities or enrichment supplements to the curriculum.

For example, a sixth grade interdisciplinary team of four teachers may wish to provide some time for spelling and handwriting activities as a total team experience rather than restrict it to the domain of the language arts teacher. These teachers would then work together to plan the program, identify the time allocation for these activities, and evaluate the effectiveness of this approach. In this example, teachers must make decisions about how the total time frame will be used to present the composite program that best meets the needs of students.

Finally, flexible scheduling is an excellent way for teachers to develop the team building or relationship described in previous sections. The discussions about schedule enable teachers to really get to know each other, work through expectations of each other, resolve differences, and work toward team goals. Rather than discussing some superficial topic, teams can approach items mandating flexible scheduling in a way that truly facilitates team building.

Flexible scheduling is a concept, a point-of-view, a basis for teachers to work together to achieve a common goal - the best possible learning experience for the pupils served. In order to achieve flexibility, there must be a block-of-time schedule and teachers who are willing to utilize flexible or modular strategies. This chapter will introduce techniques for utilizing the block-of-time, creating rotating schedules, designing modular sub-divisions of time, identifying local options, and creating alternate day rotations. The more a team of teachers employs flexible scheduling techniques, the more likely it is that they are truly responding to the needs of the students.

BLOCK-OF-TIME SCHEDULING

Block-of-time teaching or scheduling is when two or more teachers of two or

80

more subjects teach those classes during the same block-of-time. For example, an English, social studies, mathematics, and science teacher in grade 7 have the same four classes for periods 1-4 each day. These teachers have, in essence, a total of 200 minutes of instruction for the 110 pupils on the team. They have common planning periods outside the block during which they can plan cooperatively.

A second example might be an art and music teacher who have the same 54 students period 1 on Monday, period 2 on Tuesday and Wednesday, and period 6 on Thursday and Friday. The teachers can re-group the pupils or sub-divide the pupils however they choose. If all pupils are singing in the chorus, the chorus teacher could form a soprano group and an alto group. Sopranos would be in music and art together. On some days, all 54 pupils could be in chorus; on other days, all 54 pupils could see a film or hear a guest speaker in art. The responsibility for sub-dividing the pupils rests with the two teachers involved. No other portion of the schedule is affected once the blocks are set.

Block-of-time scheduling is also a factor in disciplinary or single-subject teams. Two mathematics teachers may share fifty-five pupils for Algebra I period 3 each day. The same students must be scheduled with the same teachers each day to permit the re-grouping of pupils based on their achievement or performance in algebra.

There is a difference between interdisciplinary team organization and block-of-time. To be an interdisciplinary team, the three, four or five teachers do not have to be scheduled at the same time. Although it is most advisable, it is not absolutely mandatory. Block-of-time requires that the teachers involved are, in fact, teaching at the same time. Ideally, all interdisciplinary teams (as well as core/combination and disciplinary teams) would be on a block-of-time basis.

The following is an example of block-of-time scheduling:

7A TEAM SCHEDULE

TIME	PERIOD	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:40-9:30	1	Art/Music	Physical Education	Physical Education	Exploratory	Art/Music
9:30-10:20	2	7A	7A	7A	7A	7A
10:20-11:10	3	7A	7A	7A	7A	7A
11:10-11:40		L	U	N	C	H
11:40-12:30	4	7A	Art/Music	7A	Art/Music	7A

12:30- 1:20	5	7A	7A	7A	7A	7A
1:20- 2:10	6	Explora-tory	7A	7A	7A	7A
2:10- 3:00	7	7A	Explora-tory	Art/ Music	Physical Education	Explora-tory

The coding 7A indicates that the English, social studies, mathematics, and science teachers are available to teach the four sections of the team. There are 23 periods during a week for this block-of-time interdisciplinary program. When the team is assigned to physical education, there are four teachers available to teach them. Pupils may be re-assigned among the four teachers according to skills, needs, or interests because this is a block-of-time disciplinary team.

Additionally, there are two art and two music teachers available each time the team is scheduled for art/music. A pupil has art one day and music the next day; but, other variations are possible because this is a block-of-time combination subject team. During the four exploratory periods, six teachers are available to teach French, Spanish, foods, clothing, wood, and electricity. Pupils rotate among these six stations every six weeks.

ROTATING SCHEDULES

One of the benefits of the block-of-time approach is the option of a rotating schedule. Since there are four teaching sections, there can be four options for the rotations or sequences of the classes through the various subjects of the interdisciplinary team. In this way, each section can experience each of the options for an equal amount of time during the school year. If there are advantages and/or disadvantages of any of the options, all teaching sections have the opportunity for both the advantages and disadvantages. Rotations can be bi-weekly, monthly, or quarterly. The rotating schedules will reflect only 20 of the 23 periods that the students are with the interdisciplinary team; the other subjects remain constant. Since three periods are utilized for home base activities, these three periods do not rotate.

The following examples will demonstrate the steps in creating a rotating schedule. For each period that the students are in the interdisciplinary team, each section attends one major subject. For example, the schedule for period two on Wednesday is as follows:

WEDNESDAY

PERIOD	SECTION	SUBJECT
2	1	Science
	2	Mathematics
	3	Social Studies
	4	Science

The concept of rotation is then expanded to the entire day as follows:

WEDNESDAY

PERIOD	SECTION	SUBJECT
2	1	Science
	2	Mathematics
	3	Social Studies
	4	English
3	1	English
	2	Science
	3	Mathematics
	4	Social Studies
	LUNCH	
4	1	Social Studies
	2	English
	3	Science
	4	Mathematics
5	1	Mathematics
	2	Social Studies
	3	English
	4	Science
6	HOME BASE ACTIVITIES	

This concept is then expanded for the entire week as demonstrated in these four schedules.

SECTION #1

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1					
2	English	English	English	English	

3	Soc. Stu.	Soc. Stu.	Soc. Stu.	Soc. Stu.	English
4	Math		Science		Soc. Stu.
5	Science	Math	Math	Math	Math
6		Science		Science	Science
7					

SECTION #2

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1					
2	Soc. Stu.	Soc. Stu.	Soc. Stu.	Soc. Stu.	
3	Math	Math	Math	Math	Soc. Stu.
4	Science		Science		Math
5	English	Science	English	Science	Science
6		English		English	English
7					

SECTION #3

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1					
2	Math	Math	Math	Math	
3	Science	Science	Science	Science	Math

4	English		Soc. Stu.		Science
5	Soc. Stu.	English	English	English	English
6		Soc. Stu.		Soc. Stu.	Soc. Stu.
7					

SECTION #4

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1					
2	Science	Science	Science	Science	
3	English	English	English	English	Science
4	Soc. Stu.		Math		English
5	Math	Soc. Stu.	Soc. Stu.	Soc. Stu.	Soc. Stu.
6		Math		Math	Math
7					

Activity:

1. What is the commitment of our school and/or team to the concept of flexible scheduling?
2. To what extend does the administration of the school encourage the use of flexible scheduling?
3. What is our accountability as we utilize flexible scheduling?
4. What resource persons are available to help our team create small instructional groups?
5. Have the persons who built the master schedule provided a block-of-time for our team?
6. To what extent do we want to utilize block-of-time opportunities that exist in our schedule?

7. How effectively do we communicate (as a team) our wishes to utilize the block-of-time opportunities that exist?
8. How will we evaluate our use of block-of-time?
9. What rotations are possible for our team?

MODULAR SUBDIVISIONS OF TIME

When the block-of-time concept has been utilized in the construction of the master schedule, the provision for modular subdivisions of time exists. A module refers to an amount of time other than the usual period. Modules can be 10, 15, 20, 25, 30, 35, or 40 minutes. Smaller modules suggest greater flexibility. A modular approach can be used to divide blocks-of-time for various activities. An eighth grade team may wish to use a flexible/modular schedule to implement a home-base program as well as a time for formal reading instruction.

Traditional Grade 8

8:30 - 8:40 - Homeroom
8:40 - 9:30 - Period 1 - Algebra I
9:30 - 10:20 - Period 2 - English
10:20 - 11:10 - Period 3 - Art
11:10 - 12:00 - Period 4 - Physical Education
12:00 - 12:30 - LUNCH
12:30 - 1:20 - Period 5 - French I
1:20 - 2:10 - Period 6 - Social Studies
2:10 - 3:00 - Period 7 - Science

Flexible/Modular Approach Grade 8

8:30 - 8:50 - Homeroom & Home Base Activities
8:50 - 9:35 - Period 1 - Algrbra I
9:35 - 10:20 - Period 2 - English
10:20 - 11:10 - Period 3 - Art
11:10 - 12:00 - Period 4 - Physical Education
12:00 - 12:30 - LUNCH
12:30 - 1:00 - Reading Activity
1:00 - 1:40 - Period 5 - French I
1:40 - 2:20 - Period 6 - Social Studies
2:20 - 3:00 - Period 7 - Science

In grade 6, for example, the teachers may choose to utilize a 150 minute block-of-time to find time for intensive spelling and handwriting instruction in addition to the regular program of studies.

12:00 - 12:30 - LUNCH
12:30 - 1:00 - Spelling, Handwriting Activities
1:00 - 1:40 - Period 5
1:40 - 2:20 - Period 6
2:20 - 3:00 - Period 7

A seventh grade team could use a modular approach to create time to introduce the skill-of-the-week and still allow pupils to see all of their teachers on that day.

8:30 - 8:40 - Homeroom
8:40 - 9:00 - Introduce Skill-of-the-week
9:00 - 9:40 - Period 1
9:40 - 10:20 - Period 2
Continue with regular schedule

When modular subdivisions of time are used, the frequency and duration of class meetings are determined by the teachers. These decisions should be based upon the instructional tasks and the needs of the students. All courses need not meet every day. The time allocated for a given activity depends on the nature of that activity. Teams of teachers are encouraged to think of all possible modular subdivisions of time as they plan a variety of activities to meet the unique learning needs of early adolescent students. Teams of teachers may subdivide a 100 minute block-of-time in several different ways.

Time	Wednesday
9:30 to 10:20	100 MINUTES
10:20 to 11:10	

In the first example, the goal of the teaching team was to provide the opportunity for students to attend all four classes during a two period block-of-time prior to lunch. This plan could be utilized on a day when the students would only be in school until lunch or if a special event were to be scheduled in the afternoon.

Time	Wednesday
9:30	CREATE
	FOUR
	25 MINUTE
11:10	MODULES

A variation of the above flexible schedule could be when a three-member team needs to subdivide the 100 minutes. Students could attend each class for 33 minutes to accomplish the same goal.

Situations may arise when members of the team would like to create a 75 minute module followed by a 25 minute module. This scheme could be utilized when the science teacher was doing a laboratory lesson, when any of the teachers of the team planned a lesson to introduce a new unit of study, or when one or more teachers scheduled an independent study program. This model is for any lesson that consists of activities that would sustain the interest of students for 75 minutes.

Time	Wednesday
9:30	CREATE TWO (75 minutes)
11:10	MODULES (25 minutes)

This approach to modular subdivision of time can be extended to the entire day or the amount of time the team of teachers is responsible for the students on that team, not just the 100 minutes in the morning or the 150 minutes in the afternoon. For example, the team of teachers may wish to plan a special orientation for students on the first day of school. The schedule below will provide the teachers of the team an opportunity to do an orientation session in large groups, see each section for 40 minutes, and then have a follow-up activity for the last 30 minutes that the students are assigned to the team. On this schedule, students are away from the team until 9:30 a.m. and after 2:10 p.m.

Time	Wednesday
9:30 to 10:30	ORIENTATION SESSION
	SECTION/SUBJECT

10:30 to 11:10	1	Math
	2	Social Studies
	3	English
	4	Science
11:10- 11:40	LUNCH	
11:40 to 12:20	1	Social Studies
	2	English
	3	Science
	4	Math
12:20 to 1:00	1	Science
	2	Math
	3	Social Studies
	4	English
1:00 to 1:40	1	English
	2	Science
	3	Math
	4	Social Studies
1:40 to 2:10	FOLLOW-UP ACTIVITY	

IDENTIFYING LOCAL OPTIONS

Teams of teachers should identify optional programs that may be developed by the team in response to the needs of the students. These local options are supplemental experiences to the basic curriculum.

Some examples are:

(1) Home-base or teacher/advisory (if not scheduled as part of the regular schedule)

(2) Skills - either a skill-of-the-week, a general emphasis on skills development, or a specific skills lab program

(3) SQUIRT - Sustained, Quiet, Uninterrupted, Independent, Reading Time is an excellent opportunity for all teachers and students of a team to read

for 30 or so minutes per day or per week
(4) an extended homeroom to provide time for student government programs
(5) spelling/handwriting activities
(6) small group discussions or skills activities

Generally, the responsibility for developing the daily, weekly and monthly schedules should rest with the team. Teachers should feel comfortable sub-dividing the total block-of-time to provide meaningful learning experiences for pupils. Again, the more often a team utilizes flexible scheduling techniques, the more likely it is that the team is responding to the needs of its students. These actions can be reported to the principal on weekly team planning logs.

ALTERNATE DAY ROTATIONS

The final approach to flexible scheduling is alternate day rotations. This approach provides an opportunity for disciplinary and core/combination teams to become flexible. An example of an alternate day rotation is when an art teacher and a music teacher are scheduled on a parallel, block-of-time basis with the same 56 students for these two courses. On day one, half of the students are in each course; on day two, students attend the other course. Classes meet every other day or five times within two weeks. Alternate day rotations permit the teachers to combine classes when appropriate and re-group students according to the needs of the students and the parameters of the program. More specifically, all of the students involved in this parallel could be chorus students. Thus, the music teacher could sub-group the students according to soprano, alto, or tenor. As a student's voice might change as a function of physical development, re-grouping could occur

Typical alternate day rotations include:

(1) Physical Education/General Music
(2) Physical Education/Chorus
(3) Foreign Language Appreciation/Computers
(4) Art/Computers
(5) Specific Electives/Other Electives
(6) Electives/Physical Education
(7) Woodwind Instruments/Art
(8) Brass Instruments/Art
(9) Percussion Instruments/Art
(10) Stringed Instruments/Art

Other courses could be included in these alternate day rotations; the above list simply represents some examples or suggestions.

Alternate day rotations provide an opportunity for re-grouping students as well as having the subjects rotate on a daily, weekly, monthly, or quarterly basis. For example, as the chorus prepares for a concert, the chorus teacher might want the entire group of students for the week prior to the concert so the students can refine their choral presentation. If the school system offers electives on a quarterly basis, the alternate day rotation model can be utilized.

SUMMARY

Flexible scheduling techniques permit a team of teachers to develop a comprehensive curriculum that responds to the particular needs of their pupils. Obviously, needs can vary from team to team. Block-of-time scheduling is needed to facilitate the modular sub-divisions. As teachers utilize flexible scheduling techniques, the pupils are the beneficiaries.

Activity:

1. What opportunities for modular scheduling exist within our team schedule?
2. How can we assess the attention span limitations of our pupils?
3. What are some of the special needs of our students that can best be met by using a modular approach?
4. What local options do we wish to provide? How will we schedule these optional activities?
5. What alternate day rotations exist in our schedule? How can we utilize these opportunities to improve our delivery of instruction?
6. How will we inform students of these changes in the schedule?
7. How will we evaluate the effectiveness of our modular/flexible scheduling strategies?

10

Grouping and Re-grouping Pupils For Instructional Purposes

The team process should provide opportunities to group and re-group students for a variety of educational purposes during the school day. In some secondary schools, a group of 25-30 boys and girls are known as a class and, for the most part, remain together as a group for the six or seven periods of the day. In other secondary schools, students are "individually scheduled" so that a student could conceivably be in six or seven different groupings with as many as 150-200 different pupils each day and not really be able to make friends with or psychologically identify with more than a very few students. The effective middle school organizational plan should be somewhere between these extremes.

In the middle school, interdisciplinary teams can be created for 100-140 pupils, disciplinary teams can be formed for 60-140 pupils in a single subject, and core/combination subject teams can be designed for 60-90 pupils for a block of two or three subjects. In each of these situations, pupils can be grouped initially and then subsequently re-grouped as needed to meet the learning needs of the students. The concept of flexible grouping of students is another way the middle school can respond to the ever-changing developmental needs of early adolescents.

EXAMPLES OF TEAM ORGANIZATION OR SETTINGS

Middle schools organize students for instructional purposes as part of the overall scheduling process. It is essential that teachers be aware of the organization and the implications of the scheduling process for the day-to-day teaching of students. Several organizational options are possible.

Interdisciplinary. A middle school with interdisciplinary teams will usually organize four or five classes per grade level into teams. If the school follows homogeneous grouping, the plan could be like the examples below.

Grade 7

Sections of Team 7A	Sections of Team 7B
#1 - Above Average	#1 - Gifted and Talented
#2 - Average	#2 - Above Average
#3 - Average	#3 - Average
#4 - Basic	#4 - Average

In this example, approximately 110 pupils could be assigned to Team 7A and another 110 pupils assigned to Team 7B. There would be an English, social studies, mathematics, and science teacher on each of the teams. Pupils could be assigned to one of the four teaching sections of each of the teams by the administration or guidance department. This is an example of the initial grouping of students within the interdisciplinary team model.

Pupils do not need to remain in these original groupings for the entire year, however. Perhaps the pupil went through a major growth spurt during the summer, profited greatly from a remedial reading program, or was truly motivated to achieve by the present team of teachers. Teachers can change a student's section within the team or even create an individualized schedule for a student who should be in an above average section for mathematics and science but an average section for social studies and English. Cross-team re-grouping is also possible. A student could be enrolled in two gifted and talented courses on Team 7B and two above average courses on Team 7A. A student could be enrolled in two basic classes on Team 7A and two average classes on Team 7B. A mainstreamed special education student could participate in two average classes on 7B and two special education courses under the supervision of the special education department. Adjustments to the grouping arrangements are an on-going responsibility of the four or five teachers of the interdisciplinary team.

Disciplinary. A school may assign a block of 115-120 pupils to physical education with the same four physical education teachers at the same time. All of the pupils on interdisciplinary team 7A could go to physical education at the same time. Each pupil could then be assigned to one of the four physical education teachers for home-base purposes — taking roll, recording and posting grades, counseling — but actually be in a different group (with a different teacher) for various units of instruction.

Pupils could be assigned to an instructional group according to level of skill, prior experience, or interests of the pupil. In a gymnastics unit, for example, pupils could be grouped by performance level. At other times, pupils could select archery, badminton, volleyball or soccer. For some units, pupils could rotate among the teachers on a round-robin basis. By the end of the school year, each of the four physical education teachers would know each of the 115-120 pupils; and the students will have completed a comprehensive physical education program geared to the varied interests, skills, and needs of individuals.

A second example of a disciplinary team might be reading in grade 6. Two teachers could be paired for 54 students or two sections. One might teach language arts and social studies to both sections while the other specializes in mathematics and science for both sections. But, the two teachers teach reading at the same time for the 54 students. In fact, the two sixth grade teachers could be joined by the school's reading specialist period 1 every day to provide reading instruction for the 54 students.

The three professionals might choose to group these 54 pupils for reading accordingly.

Reading Teacher
- Group #1 - Remedial Group - 3rd & 4th grade levels - 10 pupils

Teacher A (Language Arts/Social Studies)
- Group #2 - 5th Grade Level - 10 students
- Group #3 - 6-1 Basal - 12 students

Teacher B (Math/Science)
- Group #4 - 6-2 Basal - 12 students
- Group #5 - 7-1 and above - 10 students

These three staff members are operating their own disciplinary team as an independent variable. They could re-group pupils at any time according to the growth and development of each individual student in reading. Grouping in reading does not affect grouping for any other part of the instructional program.

A third example of a disciplinary team in the middle school could be Algebra I in grade 8. Two mathematics teachers could be responsible for 50 students. They could begin the school year with a quick diagnostic test and group the 50 students into two groups of 25 for a review of integers, the associative law, the commutative law, rational numbers, or any other topic in Mathematics 7 that would be important in the first unit of Algebra I.

At this point, the teachers could unite the two groups (either homogeneously or heterogeneously) and teach the first unit concurrently. At the end of the first unit, they would give the same unit test. After the test was scored, pupils who did well (in either section) could be given enrichment work by one teacher while the other teacher could give remedial work and eventually re-test pupils in either group who did poorly on the test. The teachers could then make decisions about the grouping for Unit II and begin to teach Unit II accordingly. This process could be repeated throughout the year. Grouping would be a function of cumulative achievement.

Core/Combination Subject Team. A chorus teacher and an art teacher could be scheduled on a parallel basis with 60 students for the two subjects. They could meet and decide to have the chorus teacher divide the 60 students into two groups based on soprano/alto, ability to read music, or some other basis. With the cooperation of the art teacher, the chorus teacher could re-group individual students between the two sections during the course of the school year based on performance factors in chorus.

Team Organizations Not Mutually Exclusive. It is important to remember that the three team organizational patterns are not mutually exclusive. A seventh grader could be on an interdisciplinary team for English, social studies, mathematics, and science; a disciplinary team for physical education; a core/combination team for art and music; and a second core/combination team for industrial arts, home economics, and foreign language exploratory. The grouping decisions in each of the team settings are independent of the others; therefore, a student can be grouped and re-grouped based on the students' needs and performance factors in each of these settings. The common bond would be the 110 student grouping called Team 7A. Generally, the interdisciplinary subject teachers are the advisory group that can coordinate or orchestrate the entire process.

WHAT ARE WE TRYING TO ACCOMPLISH BY GROUPING AND RE-GROUPING?

The team organization in the middle school facilitates grouping and re-grouping students. These re-grouping practices should help to bring about the optimum learning environment for the student within an environment that has the structure and security needed for the early adolescent learner.

Focusing on the Needs of Students. Each team - interdisciplinary, disciplinary, or core/combination team - should focus on the needs of students. Each team needs common planning time as part of the work day to look at students within that portion of the instructional program. Whether a team is made up of 60, 90, or 120 students, the teachers on that team have the obligation to view each student as an individual. Each student is going through a series of developmental changes at his or her own rate and no one student is exactly like another.

Teachers must resist the temptation to look at or talk about one class or another class. They need to recognize that classes are made up of individuals, and they must look at the motivation, readiness, home background, reading scores, mathematics scores, and interests of each individual. The team becomes the vehicle to respond to such needs. At times, it becomes necessary to adjust the instructional program or instructional level of an individual student; and the grouping/re-grouping process is the way a team shows its concern for the individual.

Enhancing the Self-Concept. A pupil needs variety during the course of the day and should not be with the same 25-30 boys and girls for the seven periods of the day. This is especially true if a child is a slow learner or is learning disabled. These youngsters need an opportunity to be "mainstreamed" with others the same age in experiences where the disability or limitation will not restrict the opportunity to learn. Courses such as art, music, physical education, industrial arts, and home economics should present opportunities to reach all pupils in heterogeneous situations and to individualize learning.

By the same token, gifted and talented students need opportunities to mix with other students. By placing G & T pupils into interdisciplinary teams that are heterogeneous in their total composition, these boys and girls will have chances to meet and work with other students. They need the opportunity to be with others as much as the slow learners.

The middle school experience should help, not hinder, the development of a proper, positive self-concept. By grouping and re-grouping students, the student has varied opportunities to develop a positive view of self. With the additional support of counseling and home-base activities, the total curriculum can provide ample positive experiences.

ROLE OF THE COUNSELOR AND PUPIL DATA SYSTEMS

Guidance counselors play a key role in grouping students. Although counselors usually work closely with administrators in developing lists for the initial grouping of students, it is even more important for counselors to work with the various teams during the course of the school year to identify opportunities for re-grouping.

Counselors have access to all the data needed to monitor student development during the early adolescent years. Types of data needed to help teachers understand students and provide the necessary levels of instruction include:

1. Record of achievement in previous grades
2. Performance on standardized achievement tests
3. Performance on standardized tests of scholastic aptitude or mental ability
4. Performance on interest inventories or career preference instruments
5. Performance on individually administered personality or educational assessment measures
6. Performance on functional reading/mathematics/writing tests
7. Anecdotal reports in the cumulative folder
8. Rating scales completed in prior years
9. Questionnaire surveys completed by the student
10. Autobiographies, case studies
11. Records of home visits or social histories
12. Interview record of the counselor

Data have limitations, and counselors need to help place the data elements in proper perspective. By attending team planning periods on a regular basis, counselors can help teachers make decisions about the re-grouping of youngsters to achieve the best learning environment.

RE-GROUPING FOR SPECIAL ACTIVITIES

In addition to re-grouping pupils from one teaching situation to another for English, physical education, algebra, or chorus, the opportunity exists to re-group students for special activities such as functional reading, spelling, handwriting, skills lab, or home-base.

(1) **Reading.** Some middle schools use varied approaches in teaching reading. A basal reading program may exist in grade six with reading taught through the various content areas and/or by special re-grouping within interdisciplinary teams.

One approach to teaching functional reading skills could involve all four or five teachers of the interdisciplinary team in grade 6 or 7. Five domains exist in the area of functional reading:

Following directions
Locating information from reference sources
Gaining information from the main idea
Gaining information using details
Understanding forms

Each of the teachers could develop a packet of materials or a mini-unit on one domain; pupils would rotate on a round-robin basis several modules per week over a period of weeks to attend all five programs. Pupils could be grouped according to performance on a preassessment device or in homogeneous or heterogeneous groups. Utilizing a grouping other than their usual grouping arrangement is wise for such an activity.

At the eighth grade level, pupils reading below grade level might take a reading skills course in conjunction with an English course or a foreign language appreciation course. This course could be team taught by the reading teacher and either the English or foreign language teacher.

On certain days, both teachers would be available to teach these students. Pupils could be re-grouped according to specific aspects of the program such as reading for main ideas, use of context clues, word attack, or sequencing skills. Pupils would be re-grouped according to their strengths and weaknesses on specific reading skills. This would change during the course of the school year.

(2) **Spelling/Handwriting.** In middle schools where sixth grade pupils are in four or five teacher interdisciplinary teams, there is often not an opportunity for the reading or language arts teacher to implement a specific program for spelling and/or handwriting; on the other hand, self-contained elementary school teachers can have spelling and handwriting activities on a regular basis.

By using modular scheduling techniques, all of the teachers of the team could allocate some time each week for spelling and handwriting activities. Pupils could be re-grouped according to levels of spelling proficiency for spelling and handwriting activities. Different sources for words could be used with different groups. Pupils would benefit from having their science teacher, for example, teaching spelling and handwriting to their group.

(3) **Skills Lab.** Using modular scheduling, a team of teachers could work together to present a skills lab program. Skills to be included are:

- writing a science laboratory report
- reading for details
- improving listening skills
- note-taking skills
- distinguishing between fact and opinion
- using the hand calculator
- introduction to the micro-computer

These skills could be presented on an interdisciplinary basis; pupils could be assigned on a homogeneous or heterogeneous basis, depending on the preference of the teachers and/or the needs of the students to be re-grouped for these types of activities. By involving other staff members, pupils could be scheduled in groups of 15-20 for the skills laboratory program.

(4) **Home-base or Teacher/advisory.** Another opportunity for re-grouping pupils for special activities involves the home-base or teacher/advisory program. Each homeroom teacher (usually an interdisciplinary team teacher) would have that group as advisees, and each of the four or five teachers could present the same home-base activity each time. Another option is, however, for each of the four or five homeroom teachers to become "specialists" in an aspect of the home-base curriculum such as:

- resolving conflict
- decision-making
- communication skills
- being a teenager in various cultures
- helping the handicapped

By having the teachers "specialize," pupils could be re-grouped by the team of teachers for these sessions on a round-robin basis.

(5) **Assemblies and Other Large Group Situations.** A final example of re-grouping for special activities would be to have assemblies or large group presentations for two, three, four, or all five sections within a team. A guest speaker, panel discussion, or thematic unit culminating activity could be presented. After a large group activity, follow-up discussions might be arranged involving small groups representing the various teaching sections of the team.

COMMUNICATIONS WITH PARENTS AND STUDENTS

Parents as well as students must understand the process of grouping and re-grouping for instruction. At an open-house before school starts or at the first PTA meeting in September, teachers should explain how pupils are grouped into teams and into teaching sections within these teams. Parents should be familiar with the grouping procedures used in each of their child's courses.

Parents should be aware also of the team's philosophy of re-grouping for special activities. This can be explained in a team newsletter distributed early in the school year. Parents who understand why will support changes in the usual routine.

Students must also understand the team's philosophy of grouping and re-grouping. As changes are made, the reasons should be reiterated. Changes should be received by students in a positive way, not as a threat to their security or self-concept.

Schedules of special activities such as reading, spelling, or home-base should be posted on bulletin boards and announced by teachers. Pupils will soon recognize these changes and adjustments as the norm, not the exception.

At the end of the school year, parents and students could participate in an evaluation of the team's efforts in the area of grouping and re-grouping. A simple instrument could be designed to assess the cognitive and affective reaction to the philosophy and practices. The results could be correlated with achievement growth as well as attitude surveys created by the team or guidance counselor. The team could then measure the extent to which the grouping practices contributed to the team's success.

SUMMARY

Grouping and re-grouping for instructional purposes is a key element of the team process in the middle school. Once teachers understand the structure of the master schedule, they are in a position to utilize grouping and re-grouping strategies to meet the unique learning needs of each individual student.

Team planning sessions should be devoted to exploring opportunities for grouping and re-grouping. As teachers implement the curriculum and strive to meet the needs of students, there could be almost no end to the opportunities for grouping and re-grouping students in grades 6, 7, and 8.

Activity:

1. What opportunities exist in the master schedule for interdisciplinary team teaching?
2. What opportunities exist in the master schedule for disciplinary team teaching?
3. What opportunities exist in the master schedule for core/combination subject teams?
4. How will pupils initially be grouped in each of these team situations?
5. What are the school's guidelines on re-grouping pupils for instructional purposes within a given team?
6. How will our team handle re-grouping pupils?
7. How will parents and students be informed of re-grouping decisions?
8. How will our team evaluate its efforts to group and re-group pupils for instructional purposes?
9. How will pupils be grouped and re-grouped for special activities on our team?

11

Effective Leadership At the Team Level

Effective leadership is vital at the team level. Without direction, the team cannot achieve its full potential as an independent organism. This leadership must come from within. External sources such as the superintendent or the building principal cannot provide the leadership needed for the day-to-day functioning of each team. A member of the team, or all of the members of the team, must accept responsibility for the team's success.

IMPORTANCE OF LEADERSHIP AT THE TEAM LEVEL

Every team is unique. No other team has the same teachers or same students. As a result, each team will have its own personality, strengths, and limitations. Each team must develop its own structure to accomplish its goals and purposes.

Every team should have a measure of local autonomy. Although there are regulations and guidelines for each school or each department of instruction, teams are able to make a great many decisions within the framework or guidelines. Each team is responsible, in its own way, to respond to the needs of its students and to deliver the prescribed program of studies.

Among the many local option functions for which the team normally has autonomy are: the initial grouping of students into teaching sections, re-grouping pupils, correlating factual information in the various subjects, selecting particular skills for emphasis, creating a skills lab program, identifying topics for the home-base program, scheduling parent conferences, and using modular scheduling techniques.

Leadership is needed at the individual team level to insure that such decisions are made properly and that the unique personality of the team emerges. Although these decisions should ultimately be reported to the building principal, they ought to be made by the individual team, not by the principal.

The team process is most effective when there is a common feeling of responsibility for the successful operation of the team. The team that is not willing to assume leadership is not ready to function as a team. Teams should feel a sense of ownership and be willing to manage their daily affairs.

ROLE OF THE TEAM LEADER

A member of the team, usually designated as team leader, must be willing to accept responsibility for the following tasks:

- **presiding over meetings** - The team leader must chair the meeting and see that all agenda items are covered. Meetings must conclude on time so that teachers are able to continue with their other responsibilities.
- **provide team building activities as needed** - For the most part, team building activities are scheduled for the beginning of the school year or at a time of crisis for a team. The team leader may, however, decide to schedule certain team building activities periodically during the course of the year. Such an approach reinforces the developmental aspect of the team building process.
- **involving all team members in discussions and meetings** - Certain members of the team may be quiet or passive. Or, some members of the team may not sense the importance of the team process and choose not to actively participate in the discussions. On the other hand, some team members may attempt to dominate the discussion and/or manipulate the decision-making process. The team leader, therefore, must work to involve all members of the team equally. Questions can be used as a way of involving everyone.
- **dealing with differences of opinion or divisiveness among team members when problems arise** - It is only natural that there will be differences of opinion on certain topics. Team members should be encouraged to be honest in sharing their ideas. Good listeners must listen carefully to the point of view of the other team members to fully understand points of view and ultimately move toward consensus. The team leader must establish a spirit of acceptance so that people will resolve differences in identifying what is best for the students.
- **accepting other group members** - Acceptance is a key topic in the group process. Many teachers may have preferences as to which members of the faculty they want to team with and which members of the faculty they would choose to exclude from their team. Obviously, it is not always possible to

form all teams with all members who truly want to be with each other. It is necessary therefore, to work at acceptance of other team members; the team leader is responsible for facilitating this acceptance.

- **developing an agenda for each meeting** - The team leader is responsible for developing an agenda for each team meeting. The agenda must include the scope and sequence of the responsibilities of the team. A number of categories must be included on a regular, systematic basis.
- **providing assistance for substitute teachers** - There will be times when members of the teaching team are absent from school on a daily or long-term basis. It is imperative to involve the substitute teacher in the team process as well as to utilize the strength of the team in helping the substitute teacher to be successful. Especially in the case of long-term substitutes, the team must extend a welcome to these individuals, utilize their strengths wherever possible, and guarantee that the team process continues despite the absence of one of the members.
- **facilitating the correlation of content as well as skills** - From a cognitive point of view, a major responsibility of the team is to correlate content and skills on a regular basis. In many cases, this involves considerable discussion and consideration of what is best for the students in light of the time available to the team of teachers. The team leader must insure that the correlation of content and skills is a high priority item of the team. Also, records should be kept of these decisions to minimuze the time needed for this process in subsequent years.
- **handling the paperwork for the team or delegating that responsibility** - Despite all efforts, to the contrary, there will always be some paperwork related to the teaming process. The team planning log is a major report that teams are required to submit on a weekly basis. Other reports may be required also as part of the accountability of this time given to teachers for the planning process. In some cases, the team leader does all of the paperwork; in other cases, the team leader may delegate the responsibility. Ideally, these decisions can be made by the team.
- **facilitating the evaluation of the team's functioning** - In a later chapter, there is an extensive plan for evaluating the team's functioning. The evaluation may be conducted at the end of each quarter or semester or on an as needed basis. The team leader has a major responsibility to see that the process occurs in an open and honest fashion. The major purpose of the evaluation is to facilitate communication among team members.
- **monitoring time limits during the team meeting** - It is essential that time limits be adhered to for each item on the agenda. If parents are scheduled to meet with the team, these sessions should start and stop on time. Items scheduled for the latter part of the agenda are just as important as those items scheduled for the earlier part of the meeting. The team leader should carefully monitor time limits to respect each item on that agenda.

- **serving as the liaison between the administration of the school and the team** - The team leader has definite responsibilities to serve as the link between the administrators and the members of the team.
- **meeting with the principal as requested or as needed** - In addition to meeting with the principal along with all other team leaders, times should be afforded when the team leader meets with the principal on a one-to-one basis.
- **monitoring the achievement of the team's goals** - The team leader must periodically stop to evaluate the achievement of the team's goals. Unlike school, department, and personal teaching goals, the team's goals may be set and evaluated on a bi-weekly, monthly, or quarterly basis. Assessing current goals is an important prerequisite for establishing future goals.
- **submitting reports for the team and receiving all communications for the team** - The team leader must submit all reports for the team or delegate that responsibility. The team leader should also be the one to receive all communications from the administration, the guidance department, and/or other resource personnel. Requests from parents to meet with the team may also be submitted to the team leader. This helps the team leader to establish the agenda for team meetings.
- **establishing consensus needed for decisions** - A variety of techniques will be needed to gain consensus once discussion has taken place. In some cases, the team leader will be able to gain consensus by simply assessing the stated position of each team member on a particular issue. In other cases, the team leader may call for a vote to know precisely what each team member's feelings are.
- **helping team members implement the middle school philosophy** - There will be times when team members lose sight of the middle school philosophy as they pursue their own agenda items or become upset while discussing a particular agenda item. The team leader must help team members to remember that the purposes of the team are to facilitate the instructional program and to implement the philosophy, goals, and rationale of the middle school program in that school.
- **informing special area teachers of team activities** - As the interdisciplinary team plans various activities, it is helpful to keep special area teachers well informed of these events. This helps to build morale within the school. As disciplinary and core/combination subject teams plan a variety of activities, they should as well inform the interdisciplinary teams of these events.
- **coordinating the involvement of resource personnel**- In order to maximize time and human resources, the team leader must carefully schedule the various resource personnel who wish to attend team meetings. If the reading teacher would like to meet with the team, the reading teacher should contact the team leader. The team leader should extend invitations to various resource personnel. The team must have its own identity and yet work effectively with all resource personnel; thus, coordination is mandatory.

- **monitoring the effectiveness of decision-making processes within the team** - Teams will utilize a variety of decision-making processes. In some cases, outspoken individuals will influence excessively the decision-making process. In other cases, the absence of thorough discussion will influence the decision-making process. The team leader must be very sensitive to the decision-making processes and reflect this information to the total team. At times, it may be necessary to halt discussion of a certain topic to look at the decision-making process in effect. This is an important responsibility for the team leader.
- **coordinating the planning for special events** - As teams plan field trips, major home-base activities, and assemblies, the team leader must be sensitive to details. Even though one member of the team may be responsible for the event, the team leader must include this special event as an on-going agenda item.
- **helping team members see opportunities for flexible scheduling and the need to re-group pupils** - The techniques for flexible scheduling and regrouping students for various instructional purposes must be implemented by each team on an individual basis. As needed, the team leader must help other team members recognize the potential of these strategies. In many ways, the team leader becomes a teacher who is introducing a new skill.
- **being certain that all team members see the relationship between planning periods and the instructional program** - As needed, the team leader must be certain that team members see the relationship between team planning periods and the instructional program.
- **utilizing sub-groupings of the team when appropriate** - There will be times when the team leader or one member of the team suggests that it is not necessary for all team members to be involved in a certain discussion or task. The team leader should then recognize the opportunity to utilize a subgrouping, designate the members of the sub-group, state the task of the subgroup and schedule a specific time for the sub-group to provide a report for the total team.

Obviously, the team leader has a very important responsibility. The team leader must insure that the team functions to the best of its potential by involving all team members in the process and providing students with the best possible instructional program.

SHARING THE LEADERSHIP RESPONSIBILITY

It is not essential that the team leader serve for the entire school year or that one person be expected to be responsible for all of the leadership responsibilities. In some middle schools, the team leader is awarded a salary supplement and serves the entire year. In other situations, the team leader is appointed by the principal and receives no additional remuneration. It is not necessary for the team leader to be a quasi-administrator or quasi-instructional supervisor. The team leader should be a peer or equal of the other team members. Since a large middle school may have 10-20 different teams in operation, it may not be feasible to have that many people with administrative/supervisory responsibility factors, paid or unpaid.

The team leader can also be chosen by the members of each teaching team or the position can be rotated. A four member interdisciplinary team can, for example decide to rotate the position of team leader every nine weeks among all four members. When this happens, every team member has a greater respect for the leadership responsibility.

Some teams have asked certain members to specialize in various facets of the team process. For instance, one member may coordinate the skills program, a second person may handle the preparation of materials for the home-base program, a third team member may handle scheduling and re-grouping responsibilities, and the fourth person may publish the bi-weekly team newsletter. Remaining leadership tasks may rotate among the members. The result is an acceptance of the leadership function by all team members. It is not always necessary or wise to "burden" one team member with all aspects of team leadership.

SUMMARY

There must be effective leadership at the team level for the team to function to the best of its potential. Many specific functions are assigned to the team leader whether appointed by the principal or selected by his/her peers. It is also possible for all team members to serve as team leader for a portion of the school year. When all team members share the experience of being team leader, they have a greater appreciation of the leadership function in the team process.

Activity:

1. How will team leaders be chosen in our school?
2. What is the role of the team leader?
3. To what extent can the role of team leader be shared?
4. How will team leadership be evaluated in our school?

12

Staff Development

Staff development is the means by which the professionals in a school district learn how to implement new programs, contribute to the development of such a program, and have the opportunity to grow professionally.

As new programs emerge nationally and/or locally, teachers should have the opportunity to learn how to implement such programs. Administrators must provide teachers with intense periods of study so they will understand these innovations or changes to be made.

When teachers know about a new program, they are better able to contribute to the design of the program. When they contribute to the design of the program, they feel more responsible for the success of the program. When teachers feel more responsible for the success of the program, programs are more successful.

In-service teachers must have the opportunity to grow professionally. School districts cannot turn to the undergraduate schools to provide the needed cadre of teachers for newer programs. Since many graduate programs are so specific in terms of required courses, school districts cannot even depend on graduate programs to provide the needed training. Then too, many teachers have completed their graduate programs. School districts must, then, provide teachers the chance to grow professionally on the job via activities, special conferences and professional study day activities.

Staff development is probably more critical at the middle level because of the emerging programs suggested in the literature, the rapid growth in the number of schools that are adopting the middle school concept, the need to train teachers, and the opportunity to pilot new programs. Without staff development, change has little chance to occur.

CHARACTERISTICS OF AN EFFECTIVE STAFF DEVELOPMENT PROGRAM

A successful staff development program at the middle level must have the following factors:

- **definite goals, objectives, and an organizational plan**
  There needs to be some master-plan for a staff development program just as there needs to be a master-plan for the implementation of the middle school concept. Definite goals and objectives are needed to guide the program, even though they can be re-evaluated or re-affirmed at certain key points along the way. Each facet of the organizational plan should fit in with the overall plan. These goals should be known by all.
- **a sustained, sequential, continuous effort**
  Staff development cannot consist of one inservice course prior to opening a school, one workshop led by an outside consultant, or one speech given by a president of the state organization for middle level schools. Each of these activities may be desirable, but staff development should provide a variety of activities on a continuous basis.
- **a thorough understanding of the middle school concept**
  Those responsible for implementing middle level schools and the staff development program must have a thorough understanding of the middle school concept. The staff development program must enable administrators, teachers, parents, and the community to know what a middle school is, how the middle level program can and should respond to the needs of early adolescents, what school organizational options are, and how to help teachers work as members of a teaching team. With an understanding of the basics, the staff development program will help teachers to achieve the real potential of the middle school concept.
- **a sensitivity to the needs of the teachers**
  Just as classroom instruction should be based on the needs of the students, the staff development program should be based on the needs of the participants. After the needs are identified, appropriate, meaningful programs can be planned. All participants may not need the same experiences or activities.
- **active involvement of the participants**
  Participants should do more than view films, video-tapes, or listen to lectures. The staff development curriculum should feature a number of hands-on activities that actively involve the participants. Participants could help to draft the philosophy or rationale, plan the steps in making the transition from the junior high plan to the middle school plan, or even create a portion of the master schedule as part of the staff development experience. Active involvement in meaningful activities will help to create a feeling of ownership on the part of the school staff.
- **an open, honest assessment of the various activities as well as the middle school program being developed**
  Honest assessment is vital to the success of any project or innovative program. Various aspects of the middle school program, as well as the total project, need an honest appraisal. Teachers, in particular, should be encouraged to offer constructive suggestions through appropriate channels. These sug-

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gestions can be offered directly to an administrator or via staff development activities. A successful staff development program will motivate teachers to be creative and share ideas. It is conceivable that some changes in the teaching contract for secondary teachers may result from the implementation of the middle school concept.

- **the opportunity to add new dimensions to the program**
  Every aspect of the model middle school program cannot be in place during the first year. Some components can be in place by year's end; but other aspects will need to be developed over time. Via the staff development program, participants will be able to contribute to the additions to or refinements of the middle school experience for the students in that school or district. The new program should relate directly to the needs of students.
- **strong leadership of the principal or project coordinator as well as leadership emerging from the faculty**
  The staff development program can be the domain of the director of middle schools, a central office person, the building principal, and/or another individual at the local school level. The leader, however, must possess good leadership skills. Not only must this person be able to lead, but this person must also be able to let leadership emerge from participants in the program. The success of the middle school concept depends on a sharing of the leadership functions.

WHO IS RESPONSIBLE FOR THE STAFF DEVELOPMENT PROGRAM?

Who is responsible for the facet of the staff development program designed to implement effective middle schools? The school district has a major responsibility in providing the necessary staff development for implementing effective middle schools. The district determines the philosophy, rationale, and other guidelines for middle grades education. The conversion to the middle school concept should, in essence, be a fundamental part of the comprehensive staff development program of the district. In most cases, the district plans the total spectrum of staff development activities. Frequently, the staff development coordinator for the district outlines the role of the district and the role of the local school.

Local schools have a major responsibility in providing the staff development required for implementing the middle school program in that building. In many ways, the building principal serves as the head of the staff development program for that school. Working within the framework of the district's philosophy and guidelines, the principal is in an excellent position to assess the needs of the staff. The leadership of the principal is a key to the success of staff development.

The staff development coordinator for the district can work with an advisory committee that has representatives of each middle school. In this way, the program could be responsive to the needs of the district as well as the needs of each middle school. Staff development is most effective when it is a shared responsibility between the school district and the individual school.

A PROCESS/CONTENT APPROACH TO STAFF DEVELOPMENT

A process/content approach is suggested for creating the staff development program to successfully implement the middle school concept. *Process* refers to the techniques, procedures, or strategies used to achieve a goal or objective within the staff development program. Process implies a particular method of doing something such as an inservice course, a summer workshop, or visits to other middle schools.

Content is simply defined as all of the subject matter or material contained in the staff development curriculum for the middle grades program. Topics would usually include a study of the development of early adolescents, models for curriculum, and organizational options.

It is probably impossible to determine whether the content or the process is more important in assessing the value of the staff development program. Participants must be actively involved in a variety of meaningful activities. At the same time, they must have the opportunity to secure the information or data underlying the concept.

In reality, it is the interaction of process and content that facilitates real learning on the part of those involved in the various aspects of the program. Again, teachers and other staff members will contribute more to the successful implementation of the new program when real learning has occurred in the staff development program.

Some Examples of Process Activities

Some examples of processes or staff development activities appropriate to the successful implementation of the middle school concept are:

1) *Classroom observations and conferences* - As the principal and other members of the supervisory team observe teachers and have individual conferences, there is an opportunity to monitor the extent to which that teacher is implementing the program. This is an excellent time for an individual conference to help the teacher understand an aspect of the program or feel good about the role that teacher is playing in making the new program work.
2) *Department meetings* - Disciplinary or single subject teams may use department meetings effectively for staff development purposes.
3) *Team planning meetings* - Teaching teams - interdisciplinary, disciplinary or core/combination - have an excellent opportunity for professional growth when they meet on a regular basis.
4) *Faculty meetings* - New ideas can be presented to the total faculty. Faculty meetings can be used for a variety of professional growth activities.
5) *Department chairmen meetings* - The principal can meet with department heads on a regular basis. Additionally, all of the department heads of a specific subject (social studies, industrial arts) for the school district can meet periodically.
6) *Meetings with team leaders* - The principal can meet with all the team leaders in the school on a regular basis. This insures good communication between teams.

7) *Meetings with teams* - The principal should meet periodically with each of the teaching teams. These meetings facilitate good communication and provide the opportunity for the principal to see the individuality of each team.

8) *Inservice courses* - Credit courses should be available for teachers and other staff members to learn about the middle school concept.

9) *Attending conferences, conventions, institutes* - Central office and local school personnel, including teachers, benefit greatly by attending conferences, conventions, and institutes that focus on middle grades education.

10) *Reading professional journals* - School districts and individual schools should subscribe to journals, newsletters, and other services that provide up-to-date information about early adolescent students and programs that enhance instruction for these students.

11) *Inviting guest speakers* - Experienced middle level educators can address a faculty or all of the teachers in a district about an important aspect of middle level education. These sessions are usually motivational; staff members can identify with both professors and practitioners.

12) *Teacher representation on committees* - At both the district and local school levels, there are opportunities to involve staff members in committees that address professional concerns. Some are long-term, standing committees; others may be formed to look at a specific topic or problem.

13) *Professional study days* - Workshops can be planned on days when students are not in school or are dismissed early so teachers can participate in staff development activities. These days should be an integral part of the school calendar.

14) *Summer workshops* - Curriculum guides can be written and/or pilot projects can be developed by involving teachers and other staff members in summer workshops. This is also an excellent way to develop the leadership needed for the middle school concept to be successful.

15) *Graduate courses* - Colleges and universities offer courses that complement the staff development program. In many cases, teachers are reimbursed for taking courses that extend their professional competencies.

16) *Visiting other schools* - Staff members can learn first hand information by visiting other middle schools that are in different stages of program implementation.

17) *Membership in professional organizations* - Professional growth occurs as a result of the activities and resources made available by professional organizations.

18) *Mobile on-site training units* - A team of professionals can visit each school to teach teachers how to implement new programs and ideas. These teams can visit for several weeks during the school year.

The list of processes for staff development is by no means exhaustive. Those responsible for staff development should think in terms of the tasks of implementing effective middle schools and how these tasks or activities can help to achieve that goal. These techniques should also be kept in mind while reading the next section on content.

Content Topics

A number of topics should comprise the content portion of the staff development program. The major topics are:

I. Characteristics of an Effective Middle School
II. Making the Transition to Middle School
III. The Early Adolescent Student
    A. Data about physical, intellectual, social-emotional, and moral development
    B. Implications for school organization, curriculum, role of the teacher, and nature of the learning environment
IV. Drafting Key Documents
    A. Defining the Middle School
    B. Conducting a Needs Assessment
    C. Writing the Philosophy, Goals and Rationale
V. Implementing a Curriculum Model
    A. Organized Knowledge
    B. Skills
    C. Personal Development
VI. Organizational Options
    A. Interdisciplinary
    B. Disciplinary
    C. Combination
VII. Role and Function of a Team
VIII. Team Building Activities
IX. Articulation with Elementary and High Schools
X. Building the Master Schedule
    A. Block-of-Time Approach
    B. Steps in Constructing the Schedule
XI. Flexible/Modular Scheduling
XII. Teaching Strategies for Early Adolescents
XIII. Grouping and Re-grouping Students for Instruction
XIV. Effective Use of Planning Periods
XV. Role of the Team Leader
XVI. Roles of Administrative/Supervisory Personnel
XVII. Evaluating the Program

Bringing Process and Content Together

At this point, the process and content factors need to be brought together. For example, the content area may be "Teaching Strategies for Early Adolescents." Initially, it is necessary to differentiate an approach that may be taken at the district level. Secondly, it is helpful to identify processes that are intended to introduce the topic and other activities or processes that will be used to reinforce the content or skills at some later stages. The introductory and reinforcement processes need to be carefully orchestrated.

In this segment of the staff development program, the curriculum could suggest presentations on teaching modalities that are appropriate (as well as those that are inappropriate) for pupils in grades 6, 7, and 8. From the list of processes, the following options may be chosen for each category:

Content: "Teaching Strategies for Early Adolescents"

Level: School District

Introductory Process:
- Inservice courses
- Department chairmen meetings

Reinforcement Process:
- Meetings with teams
- Team planning meetings
- Classroom observations and conferences

Content: "Teaching Strategies for Early Adolescents"

Level: Local School

Introductory Process:
- Faculty meetings
- Guest speakers
- Department chairmen meetings

Reinforcement Process:
- Meetings with teams
- Team planning meetings
- Classroom observations and conferences

Two other examples address other aspects of the team teaching process:

Content: "Role of the Team Leader"

Level: School District

Introductory
Summer workshop with consultant
Faculty meeting

Reinforcement:
Inservice course during fall semester
Meetings of team leaders at individual schools
Informal evaluation of team leader at the end of the first semester

Content: "Use of Flexible Scheduling Techniques"

Level: Local School

Introductory:
Guest speaker on professional study day
Faculty meeting - practicum experience for all faculty memebers

Reinforcement:
Discussion at meetings of team leaders and the building principal
Analysis of utilization of flexible scheduling practices conducted by the director of research

Again, the interaction of process and content facilitates the learning process.

Establishing Priorities and a Timetable

A timeline should be developed for the purpose of implementing the middle level program and identifying persons responsible for specific aspects of the implementation. Priorities are needed; those involved should begin work immediately on those items essential at the outset of the conversion process. The timetable then becomes a basis of evaluating the extent to which the program is being implemented in relationship to the schedule developed.

The faculties of the individual schools, the community, and central office personnel should have input in establishing priorities and determining the timetable.

In this way, all who participate in programming the implementation can work cooperatively toward the goals which have been mutually established.

Priorities and a timetable are needed not only in the initial conversion to a middle level school but also in the expansion of a program or the orientation of new members to the staff. Staff members should discuss such questions as:

1. What are our primary and secondary goals?
2. What are our immediate needs?
3. How can we adjust our list or priorities?

Dialogue and reflection on growth are needed in establishing priorities for the development of a timetable. Once developed, the timetable should be publicized to the community, taxpayers, parents, central office personnel, Board of Education members, faculties, and students. The timetable must be viewed, however, as subject to modification.

Evaluating the Staff Development Program

Some thought needs to be given to the evaluation of the staff development program. Johnston and Markle (1979) suggest a process of structured questioning or interviewing to reach valid and reliable conclusions about the effectiveness of a program. The following list is suggested by Johnston and Markle as a general scope and sequence for a question-directed program evaluation.

1. *What are we trying to evaluate?* Precisely what portion of the total middle grades education package are we trying to assess? Program evaluation will be more effective if specific components of the program can be identified. For example, it is more desireable to define the object of evaluation as the "inservice courses" than the "staff development program." Or, the object of the evaluation can be "the use of the team planning period" rather than the "staff development program."
2. *What do we expect this program component to accomplish?* What are the specific objectives of the program? What do we expect teachers to do as a result of their participation in the program? For example, team planning periods might be expected to encourage teachers to focus more on the skill development processes as they plan their lessons in their subject areas. Also, team planning periods should help teachers focus more on the total learning needs of a student.
3. *What will we accept as indicators that the program is achieving its objectives?* Can we list the teacher behaviors that will allow us to conclude that the program element has had a desirable impact? Do teachers correlate topics in one subject with topics in other subjects? Do teachers on the team have a skill-of-the-week program?
4. *What sources of data are available which will indicate the presence or absence of the indicators?* What kinds of data on teacher behaviors do we already have? What kinds of data must be collected? Can structured obser-

vations of team activities be scheduled? Can teacher self-report data be utilized? In general, what kinds of data can be assessed in a reasonable period of time with a manageable effort?

5. *What specific information from each source will be most valuable to the program evaluation?* Within each data source, what information is most clearly related to the objectives of the program? How can this information be gathered, assembled, and organized?
6. *What do the data that we have collected state about the indicators?* Do the data state that the indicators are present or absent? What indicators are present that were not anticipated?
7. *Based on the presence or absence of indicators, what can be concluded about the effectiveness of the program?* Are the indicators of a process (inservice, team planning periods) present in sufficient numbers and strength to conclude that the program is working? Can the conclusion be justified on the basis of the data rather than personal opinion or the strength of one's desire for the program to succeed?

Although other approaches can be utilized, the model by Johnston and Markle can be used in assessing the effectiveness of elements of the staff development program.

Summary

The key to the successful implementation of middle school is staff development. Those school districts and individual schools that do the best job in the area of staff development will, in effect, do the best job of creating effective middle schools.

Responsibility for the staff development program should be shared between the central office and the local school. An advisory committee can be established to include central office personnel as well as a representative of each middle level school. The principal plays a major role in implementing the staff development program in that building. If the principal is truly the instructional leader of the school, the principal should be a key person in staff development.

Both process and content are an integral part of the staff development program. It is the interaction of process and content that brings about real learning on the part of those involved in the staff development experiences. This approach will enable teachers to make a significant contribution to the development of middle schools.

Activity:

1. What is our staff development program for the middle grades?
2. What are the staff development needs of our teachers and staff?
3. How can we implement the process/content approach?

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Evaluating The Effectiveness Of The Team

The teaching team utilizes the combined skills, talents, interests, and training of teachers from one or more disciplines. In order for the team to function effectively, these components must mesh smoothly. Therefore, there is the need for some instrument to help the members of the team assess the effectiveness of the team process.

WHO SHOULD EVALUATE?

The issue of who should conduct the evaluation is a very important question. Within the educational arena, a number of agencies and/or persons are typically involved in evaluating teachers, teaching, and the curriculum — regional accrediting consortia or agencies, state accrediting groups, teams from the individual school district, the principal, and/or a group of peers from the school or school distrct. The responsibility for evaluating the effectiveness of individual teaching teams could be added to such groups' concerns.

Each of these groups could approach the assessment process with a list of goals, objectives, and guidelines. Since these might or might not reflect the priorities, experiences, strengths, or limitations of a specific teaching team, each teaching team could conduct a self-evaluation. Outsiders might not be sufficiently familiar with the team process or the specific situation to evaluate effectively.

Thus, a self-evaluation may be the most appropriate form of evaluation because it involves close introspection by the members of the team using a form that parallels the philosophy, practices, and uniqueness of that particular team. A self-evaluation involves an open sharing of feelings about the activities of a team and facilitates channeling this discussion into constructive goal-setting activities.

DEVELOPING AN INSTRUMENT

Although a sample instrument is included, the structure of an instrument could be determined by the State Department of Education, local school district, individual middle level school, or individual teaching team. The instrument should be used regularly, systematically, and in a positive fashion. Most importantly, the instrument should facilitate communication between team members.

All of the questions in the example below do not need to be included. From this rather lengthy list, itesm could be selected that are most meaningful to the individual team. Other questions that reflect the priorities, goals, or experiences of the members of the team could be added.

Evaluating the Effectiveness of the Team

	Consistently	Frequently	Occasionally	Comment
1. Does the team respond to the needs of students?				
2. Does the team enhance the self-concept of the students of the team?				
3. Do the members of the team discuss their committment to the middle school concept?				
4. Do the members of the team explore their role and function as a team?				

	Consistently	Frequently	Occasionally	Comment
5. Do members of the team make an effort to know each other?				
6. Do the members of the team discuss their expectations of each other?				
7. Does the team work effectively with resource personnel?				
8. Do the members of the team support the efforts of the team leader?				
9. Are leadership responsibilities shared?				
10. Does everyone participate equally in making team decisions?				
11. Are the guidelines for gaining consensus for decision-making followed?				
12. Have team decisions been implemented?				
13. Are records kept of team decisions?				
14. Does the team have specific goals and objectives for each school year?				
15. Does the team evaluate its goals and objectives periodically?				

	Consistently	Frequently	Occasionally	Comment
16. Do team members correlate content between the subjects included on the team?				
17. Do team members correlate the teaching of skills?				
18. Are skills taught in context?				
19. Does the team provide a personal development or home base program for the students?				
20. Do team members recognize the relationship between the planning periods and the instructional program?				
21. Do team members use a variety of techniques in communicating with parents?				
22. Do team members utilize opportunities for modular/flexible scheduling?				
23. Do team members develop and utilize rotating schedules?				
24. Do team members identify local options available to the team?				
25. Do team members develop plans to utilize local options available to the team?				

	Consistently	Frequently	Occasionally	Comment
26. Do team members utilize opportunities to group and re-group pupils for various instructional purposes?				
27. Do the team members utilize available data about pupils in developing the overall instructional program?				
28. Are individual team members sensitive to group dynamics at the team meetings?				
29. Does the team have an agenda for all team meetings?				
30. Is the agenda followed?				
31. Is team planning time kept strictly for team business?				
32. Does the team utilize sub-groupings of the team at team meetings when appropriate?				
33. Do team members offer suggestions for the design of the master schedule?				
34. Do team members participate in staff development activities?				
35. Do students benefit from the team's efforts?				

	Consistently	Frequently	Occasionally	Comment
36. Do team members discuss appropriate teaching strategies?				
37. Do team members assess team planning logs on a regular basis?				
38. Are opportunities for alternate day rotations utilized?				

USE OF THE INSTRUMENT

Members of the team should look at the questions objectively, and each member should record his/her answer to each of the questions. This could be done during a team meeting or as "homework." Then the team leader or an impartial outsider (guidance counselor, principal, assistant principal, department head) could help the team arrive at a consensus.

It is important to identify areas of agreement as well as areas of disagreement. It is important to know, for example, that all five members of the team felt that the team responds to the needs of the students consistently. Beyond agreeing on the response, team members should tell why they responded as they did. This discussion might reveal several factors more important to the team than knowing all checked the column "consistently."

On the other hand, a diversity of responses is healthy. In answering the question, "Does the team work effectively with resource personnel?," two members may say *frequently* while two members indicate *occasionally*. Rather than trying to get one team member to change his/her response to reach a majority, it is more important to find out why team members voted the way they did.

In the discussion, factors may emerge that are important in gaining insight into the situation. For example, team members may feel that they work well with the reading teacher but not with the guidance counselor. The issue could be the expectations that team members have of resource personnel and that the reading teacher is willing to create lesson plans or mini-units for the teachers of the team while the guidance counselor feels that all should work together in helping a student having some difficulty.

Assessment should lead to communication. The self-evaluation is a means of getting team members together to examine what they are doing, how they could improve, and how some priorities for improvement would be established. The most important outcome is communication. Team members should work together to plan for improvement. Team goals can emerge naturally from the assessment process.

SUMMARY

Teaching teams should evaluate their efforts as a team. A process was suggested in this chapter that will help to gauge the skills necessary for a team to operate successfully. The assessment process is a means to the end of effective communication among team members about the team, its role, and its function.

Activity:

1. Who will evaluate the effectiveness of our team?
2. Will we have the opportunity to participate in a self-evaluation as part of the overall plan for evaluation? If so, how?
3. What instrument will we use to evaluate the effectiveness of our teams? How will the instrument be used?
4. Can we use some or all of the items included in "Evaluating the Effectiveness of the Team?" Which are more relevant for us? Which are less relevant?

Epilogue

This publication is designed to help classroom teachers implement the team process as part of the implementation of the middle school concept. The success of the middle school movement depends in large measure on the willingness of teachers to implement this concept in the classroom on a daily basis. Teachers can learn these techniques and strategies through various staff development activities. A real commitment to utilize the activities and strategies described in this monograph is needed if the middle school concept is to be fully achieved.

The team is the most important unit in the middle school organizational plan. Being a member of a team involves more than a cognitive understanding of middle school literature; it needs to be an affective experience demonstrating that adults can work together to best meet the developmental needs of early adolescents.

The team process is successful when. . .

- the needs of students are met
- block-of-time scheduling is utilized
- there is flexibility in the daily, weekly, and monthly schedule
- team members are willing to share thoughts, ideas, and responsibilities
- the administration and school district support the teams' efforts
- organized knowledge and skill development are correlated
- parents are integral to the team
- there is adequate time for team planning, and that time is used productively.
- resource people are available to the team
- the team leader successfuly involves all members of the team in team activities
- local options are utilized by the team
- pupils are in various grouping arrangements during the course of the day
- staff development activities are provided
- team members practice good human relations skills
- teams take the time to evaluate their effectiveness
- students feel good about themselves
- teachers believe in the middle school concept.

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